



life.science.discovery.™



Reference Guide

MBL International Corporation (MBLI) is a leading life science company focused on providing high quality products and solutions for life science research and clinical diagnostics.

MBLI develops, manufactures and markets a wide range of ELISA and gold standard IFA test kits to aid in the diagnosis of autoimmune and infectious disease as well as an extensive portfolio of monoclonal and polyclonal antibodies, fluorescent and recombinant proteins, and ELISA kits for research related to cancer, immunology, neuroscience, allergy, autophagy, and apoptosis.

Our products are used widely in academic research institutions, pharmaceutical and biotechnology companies, government agencies, as well as hospital and reference laboratories. By providing a consultative approach, superior technical and customer support, and convenient purchasing options, MBL International Corporation is your partner in solving your scientific and clinical challenges.

Manufacturing facilities are FDA registered and ISO Certified providing our customers with the confidence that not only are our products innovative but produced in compliance with strict international standards to ensure the highest quality.

Discover how MBL International Corporation can make your science more efficient and effective.



World-wide distribution network serving nearly 50 countries



Creating innovative and novel products that target key research areas and applications



An obsessive devotion to quality providing researchers and clinicians with confidence in test results



Collaboration at every touch-point and uncompromising support to ensure you get the product and assistance when you need it

Table of Contents:

Epitope Tags	4
Cancer	8
Kinase	10
Tetramer	14
CMV Tetramer	16
Immunology	17
Epigenetics	20
Autophagy	24
Apoptosis	28
Fluorescent Proteins	32
Metabolism	34
Neuroscience	36
Infectious Disease	38
Autoimmunity	40
Featured Products	44

Abbreviation List:

Application

ELISA	Enzyme-linked Immunosorbent Assay
FCM	Flow Cytometry
ICC	Immunocytochemistry
IF	Immunofluorescence
IFA	Immunofluorescence Assay
IHC	Immunohistochemistry
IPP	Immunoprecipitation
RIP	RNP Immunoprecipitation
NT	Neutralization
WB	Western blot

Species

Bo	Bovine
Ch	Chicken
Ct	Cat
Hu	Human
Ha	Hamster
Mk	Monkey
Mo	Mouse
Rt	Rat
Rb	Rabbit

Format

HRP	Horseradish Peroxidase
FITC	Fluorescein Isothiocyanate
PE	Phycoerythrin
RUO	Research Use Only

All products are for Research Use Only unless otherwise indicated.

The MBLI Reference Guide is intended to highlight key and featured products. Please refer to www.mblintl.com for a complete listing of our portfolio of Research Use Only and Clinical Diagnostic Products.

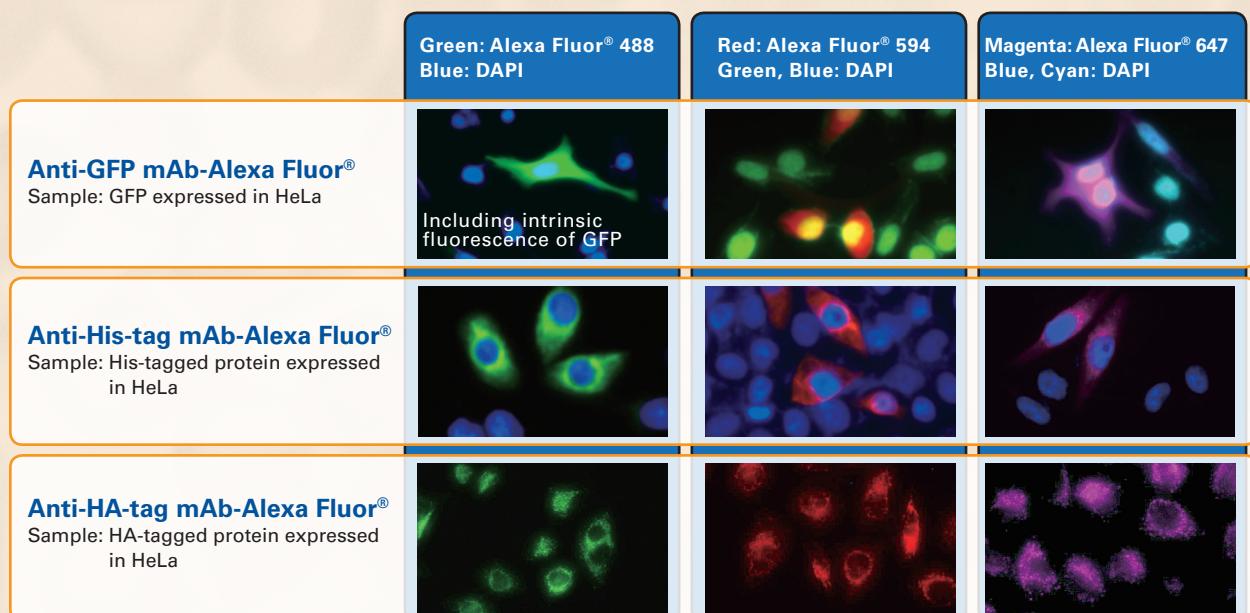
© 2013 MBL International Corporation. All rights reserved. The trademarks mentioned herein are the property of MBL International or their respective owners, unless otherwise noted.

EPITOPE TAGS

MBLI provides a variety of polyclonal and monoclonal antibodies for isolation of tagged proteins and analysis of protein-protein interactions. Our line of fusion protein and epitope antibodies are available as unlabeled and conjugated to multiple fluorophores, agarose, magnetic beads and magnetic agarose for a variety of applications.

		Antigen Target	Clonality	Application				Conjugate						
				WB	IPP	ICC	IHC	Agarose	Biotin	HRP	Alexa Fluor® 488	Alexa Fluor® 594	Alexa Fluor® 647	
Fluorescent Protein	GFP	Polyclonal/ Monoclonal		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	RFP	Polyclonal/ Monoclonal		✓	✓	✓	✓	✓	✓	✓			✓	
Epitope Tag	Chitin Binding Domain	Polyclonal		✓										
	DDDDK	Polyclonal		✓	✓	✓	✓	✓	✓	✓				
	HA	Polyclonal/ Monoclonal		✓	✓	✓		✓		✓	✓		✓	
	His	Polyclonal/ Monoclonal		✓	✓	✓		✓	✓	✓	✓	✓	✓	
	Myc	Polyclonal/ Monoclonal		✓	✓	✓		✓	✓	✓	✓	✓	✓	
	S	Polyclonal		✓	✓			✓						
	T7	Polyclonal		✓	✓			✓						
	V5	Polyclonal/ Monoclonal		✓	✓	✓		✓		✓			✓	
Fusion Protein	GST (Glutathione-S-transferase)	Polyclonal/ Monoclonal		✓	✓					✓				
	MBP (Maltose Binding protein)	Monoclonal		✓	✓									
	Trx (Thioredoxin)	Monoclonal		✓										
	β-galactosidase	Polyclonal/ Monoclonal		✓	✓	✓	✓							
	Luciferase	Polyclonal/ Monoclonal		✓	✓	✓	✓							
	Renilla Luciferase	Polyclonal		✓	✓	✓		✓						

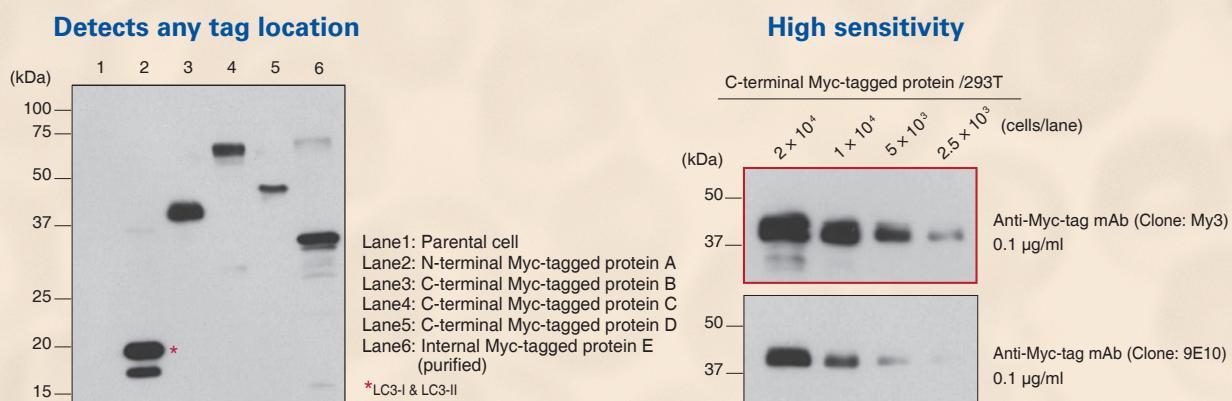
Alexa Fluor® is a registered trademark of and licensed under patents assigned to Molecular Probes, Inc. For Research Use Only.



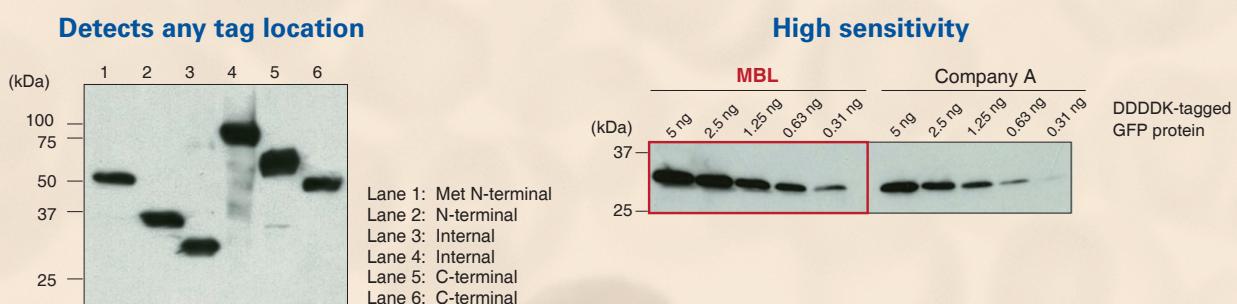
MBLI has developed and designed new monoclonal antibodies with high sensitivity.

- **Recognizes the tag at any location
(N-Terminal, C-Terminal and Internal domain)**
- **Single antibody multiple applications (WB, IPP, ICC, FCM)**
- **High sensitivity & specificity**

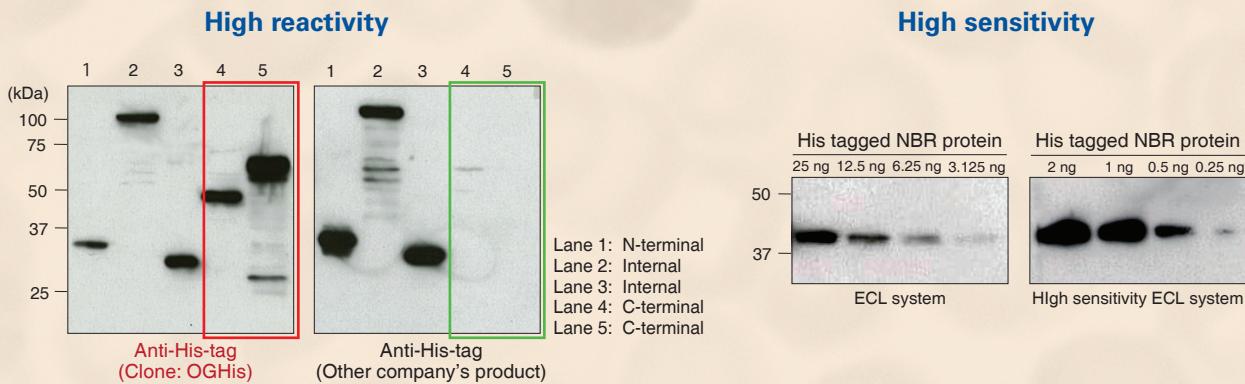
Anti-Myc-tag mAb (Clone: My3, Code No: M192-3)



Anti-DDDDK-tag mAb (Clone: FLA-1, Code No: M185-3)



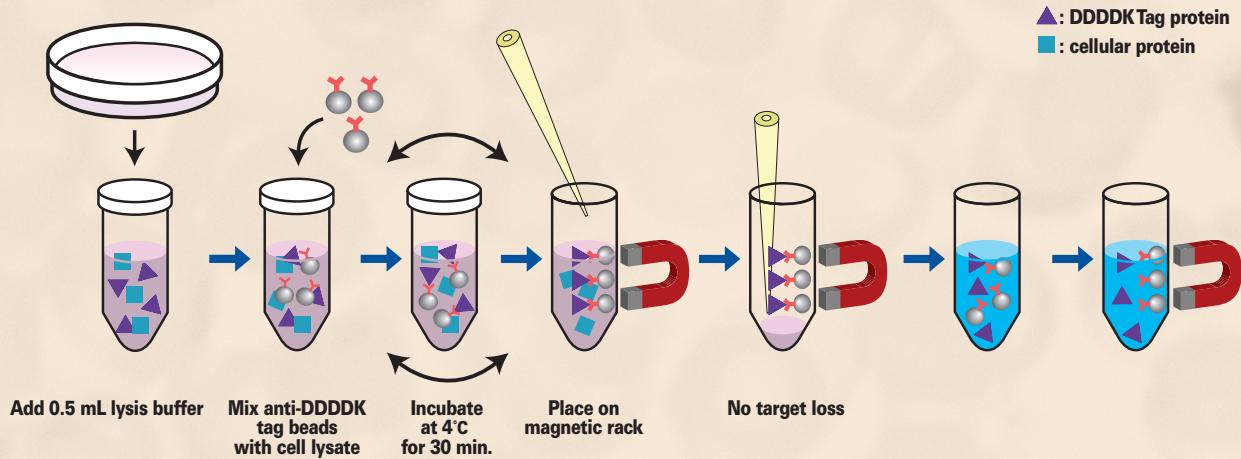
Anti-His-tag mAb (Clone: OGHis, Code No: D291-3)



SMART-IP

Tag Antibodies Conjugated to Magnetic Beads and Magnetic Agarose for Fast Immunoprecipitation

- Eliminates time-consuming centrifugation step
- High recovery of beads
- Complete removal of supernatant



Magnetic Beads

- Diameter: 3 µm, uniform size
- Spherical beads
- Higher dispersal



Magnetic Agarose

- Diameter: 20-75 µm, various size
- Magnetite microparticles entrapped within the agarose gel
- Higher capacity



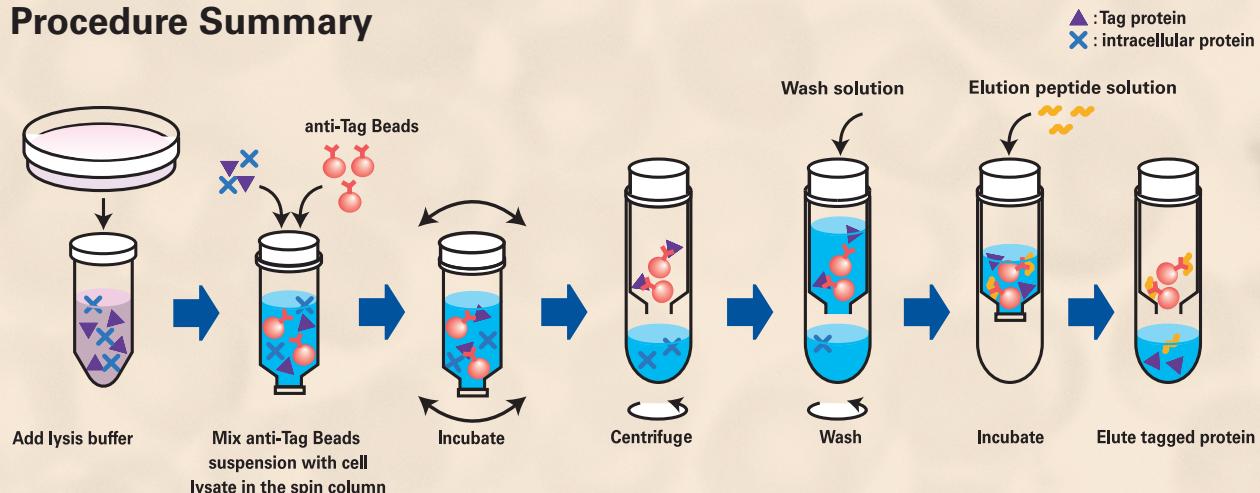
	Magnetic beads	Magnetic Agarose
GFP	D153-9	D153-10
RFP	M165-9	M165-10
DDDDK-tag	M185-9	M185-10
Myc-tag	M047-9	M047-10
His-tag	D291-9	M291-10
V5-tag	M167-9	M167-10
HA-tag	M132-9 M180-9	M132-10 M180-10
E-tag	M198-9	M198-10



TAG PROTEIN PURIFICATION

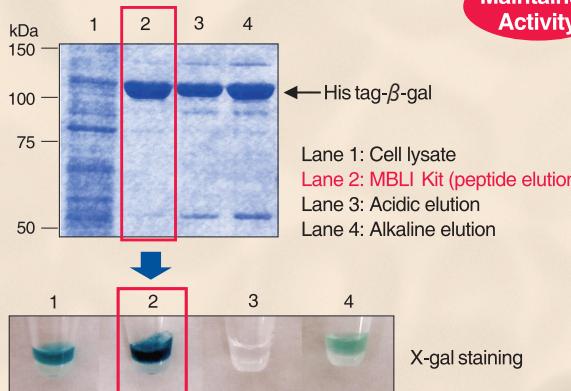
MBLI offers a wide range of anti-tag purification such as columns, gels and protein purification kits. MBLI purification kits are designed for the isolation of tagged proteins from cell lysates and cell culture supernatants. Our purification kits use anti-tag antibodies conjugated beads to purify the tagged proteins quickly and efficiently using a spin column. Our kits are optimized to maintain protein activity and conformity using neutral pH conditions.

Procedure Summary

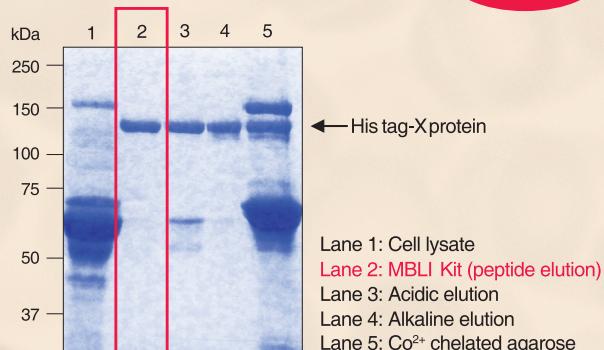


His-tagged Protein Purification Kit (Code No. 3310)

■ Protein activity of the purified proteins



■ Purification from cell culture supernatant containing serum



Purification Cartridge



Code No.

- 3326K
- 3315
- 3310
- 3305
- 3320

Product Name

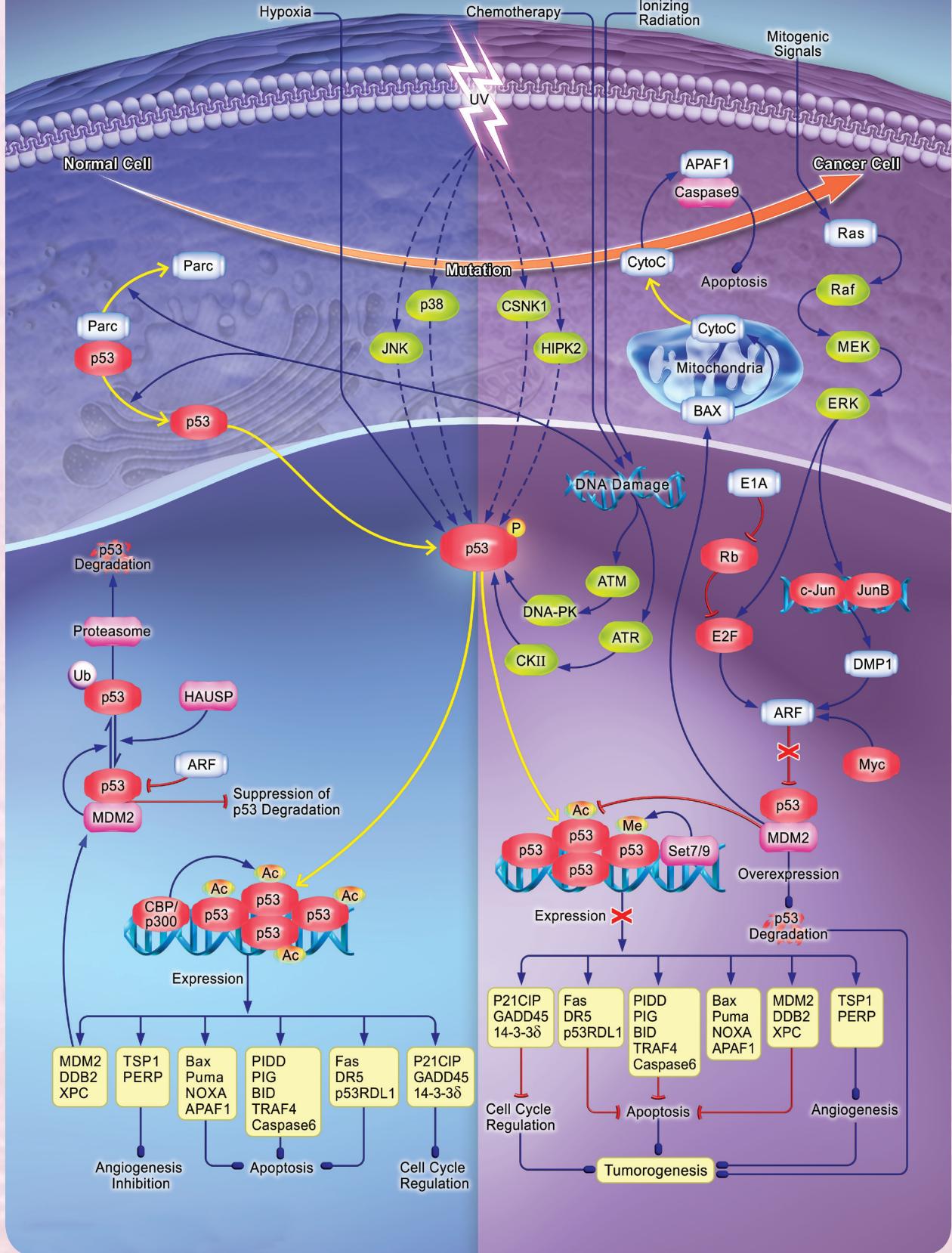
- DDDDK-tagged Protein PURIFICATION CARTRIDGE
- V5-tagged protein PURIFICATION KIT
- His-tagged Protein PURIFICATION KIT
- c-Myc-tagged Protein PURIFICATION KIT
- HA-tagged Protein PURIFICATION KIT

Size

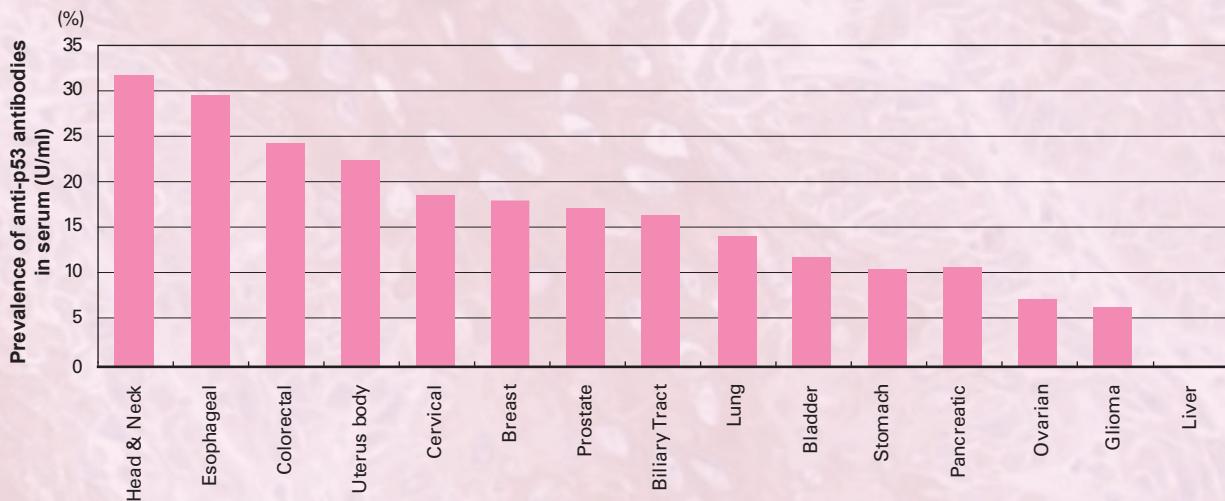
- 1 x 1 mL
- 20 test
- 20 test
- 20 test
- 20 test

Cancer

p53 in Cancer



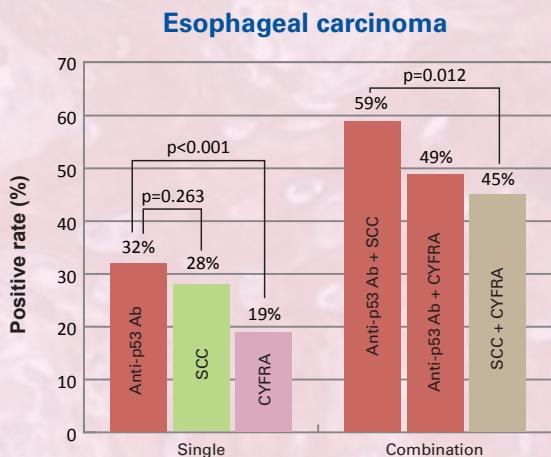
Prevalence of Anti-p53 Autoantibodies in Tumor Patients



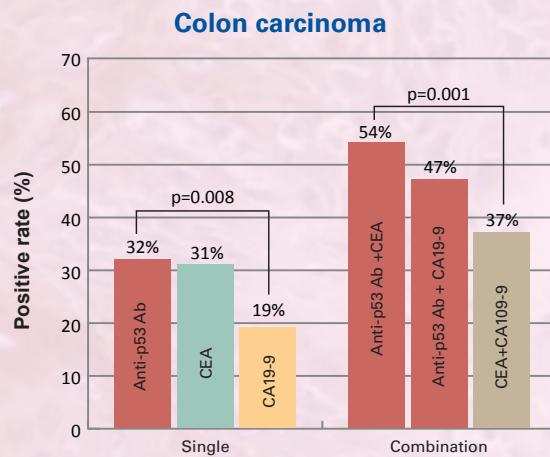
Data kindly provided by Dr. Hideaki Shimada (Toho University Omori Medical Center)

p53 is an important factor for tumor suppression and is activated under cellular stress (e.g., DNA damage) to induce cell cycle arrest or apoptosis. p53 mutants found in tumors are no longer functional as tumor suppressors, resulting in cell malignancies. The immune response in tumor patients correlates with the presence of p53 mutations, which leads to the accumulation of ineffective p53 proteins in the tumor cells. Anti-p53 autoantibodies are produced in many types of tumors and can be detected during early tumor stages compared to conventional tumor marker detection. Autoantibody signatures in cancer, such as anti-p53 antibodies, are potential tumor biomarkers.

Improved Detection of Cancer Rates Using MBLI's ELISA Kit With Conventional ELISA



Data kindly provided by Dr. Hideaki Shimada
(Toho University Omori Medical Center)



Data kindly provided by Dr. Akihiko Takeda
(Saitama Medical University)

Code No.
RG-7640E

Product Name
Anti-p53 ELISA TEST Kit

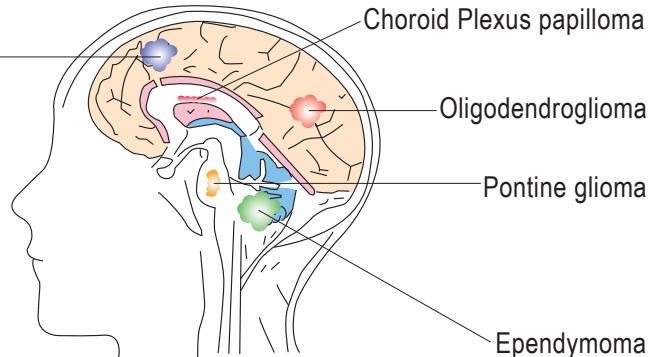
Size
48 well

IDH ANTIBODIES

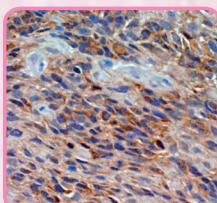
Glioma

Astrocytoma

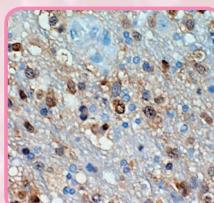
- Polycystic astrocytoma (grade I)
- Low-grade astrocytoma (grade II)
- Anaplastic astrocytoma (grade III)
- Glioblastoma multiforme (grade IV)



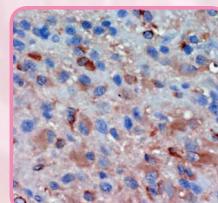
Human isocitrate dehydrogenases (IDHs) are classified into three subtypes: IDH1, IDH2 and IDH3. IDH1 mutations have been found in patients with acute myeloid leukemia, while IDH1/2 mutations have been found in multiple stages of brain tumors such glioma and glioblastoma. The mutant forms of IDH1 appear in 90% of patients with glioma while the mutant forms of IDH2 appear in 50% of patients, making IDH1/2 mutations a useful marker for prognosis of glioma. MBLI offers highly specific antibodies to mutant forms of IDH1 (R132H, R132S, R132G) and IDH2 (R172K, R172M, R172W) which can be used to detect mutated IDHs in specimens of low tumor occupancy.



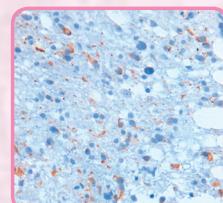
**Anti-IDH1-R132H
(Code No. D299-3)**
Human anaplastic
oligoastrocytoma



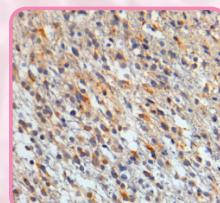
**Anti-IDH1-R132S
(Code No. D300-3)**
Human anaplastic
oligoastrocytoma



**Anti-IDH1
(Code No. D309-3)**
Human
glioblastoma



**Anti-IDH2-R172M
(Code No. D337-3)**
Human
glioma



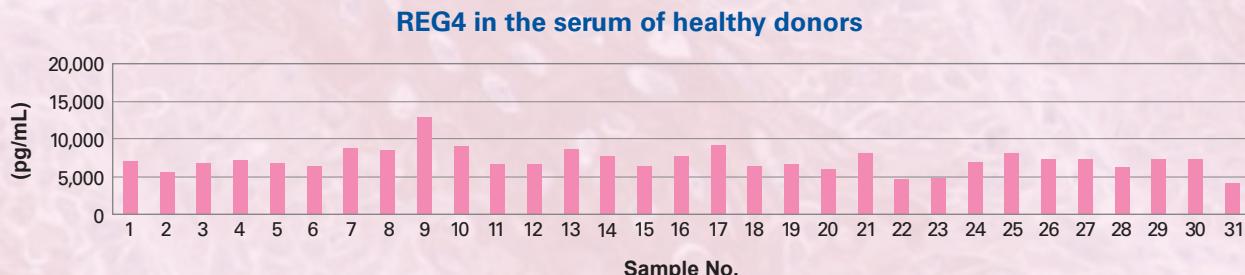
**Anti-IDH2-R172W
(Code No. D338-3)**
Human
glioma

Data kindly provided by Dr.Yukinari Kato, Tohoku University School of Medicine.

Code No.	Product Name	Clone	Species Reactivities	Application
D299-3	anti-IDH1-R132H mAb	HMAb-1	Hu	WB, IPP, ICC, IHC
D300-3	anti-IDH1-R132S mAb	SMab-1	Hu	WB, IPP, ICC, IHC
D331-3	anti-IDH1-R132G mAb	GMab-r1	Hu	WB, ICC
D309-3	anti-IDH1 mAb	RMAb-3	Hu, Ham	WB, IPP, IHC
D336-3	anti-IDH1 mAb	RcMab-1	Hu	WB, ICC
D311-3	anti-IDH2 mAb	RMAb-22	Hu, Ham	WB, IPP, ICC
D330-3	anti-IDH2 mAb	KrMab-3	Hu, Ham	WB, ICC
D328-3	anti-IDH2-R172K mAb	KMab-1	Hu	WB
D337-3	anti-IDH2-R172M mAb	MMab-1	Hu	WB, ICC, IHC
D338-3	anti-IDH2-R172W mAb	WMab-1	Hu	WB, ICC, IHC

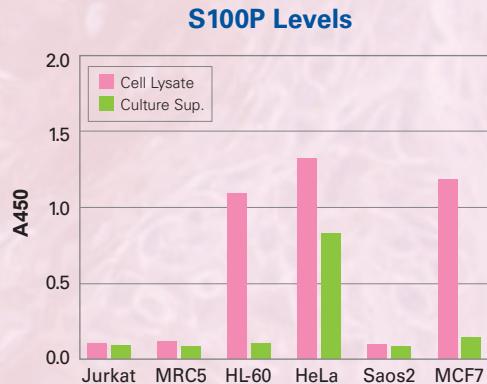
HUMAN REG4 ELISA KIT (Code No. 5337)

- Secreted protein, function is unknown
- Up-regulated in pancreatic cancer, colon cancer



S100P ELISA KIT (Code No. CY-8060)

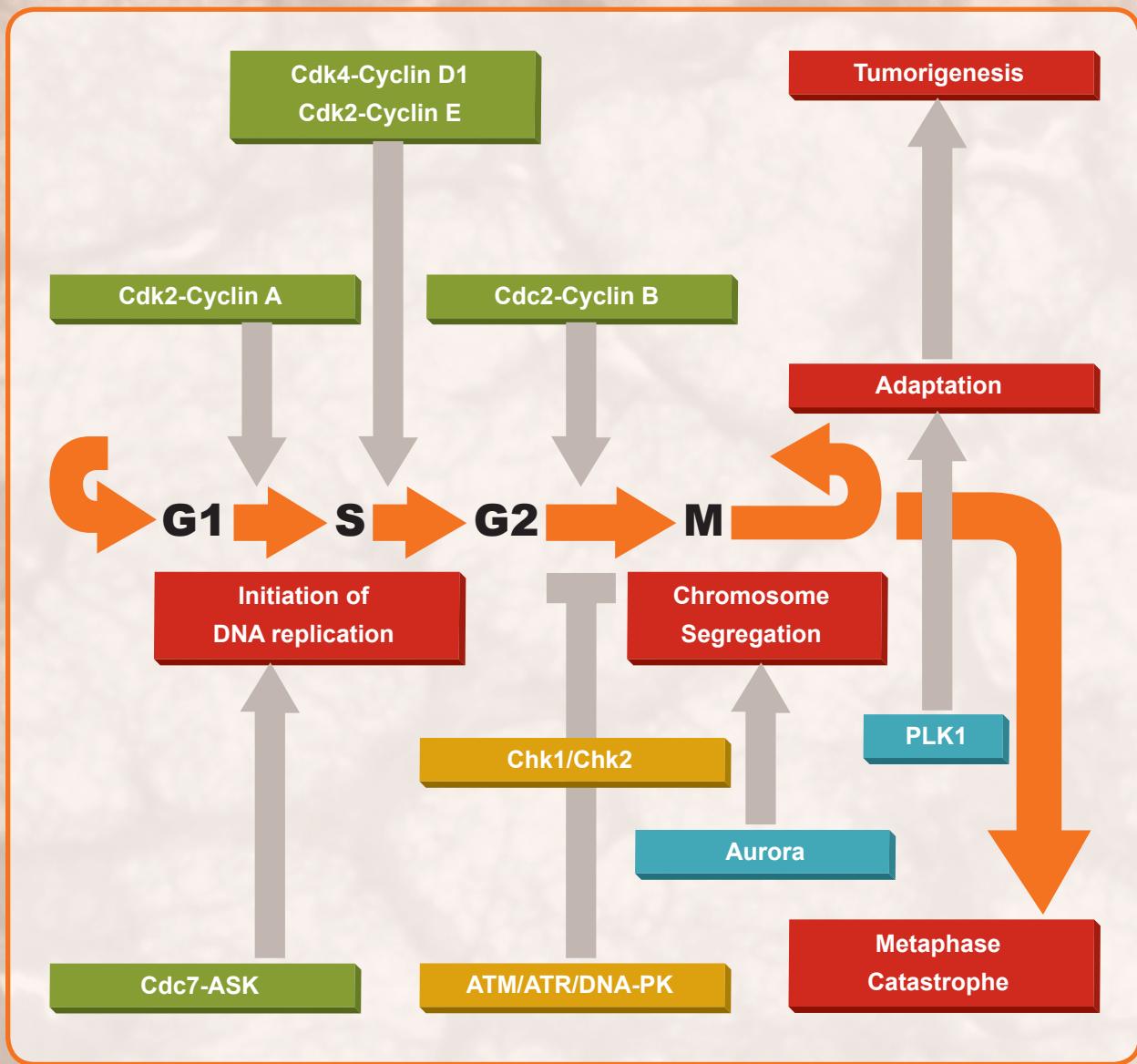
- In recent publications, S100P was highly expressed in tissues of patients with pancreatic cancer.
- Detects S100P in serum, plasma, cell lysate and cell culture supernatants.



Code No.	Product Name	Size
5321	FAM3D Human Assembly ELISA Kit	96 well
5322	NGAL Human Assembly ELISA Kit	96 well
5330	MICA Human Assembly ELISA Kit	96 well
5331	MICB Human Assembly ELISA Kit	96 well
5335	WFDC2 (HE4) Human Assembly ELISA Kit	96 well
5336	LYPD6B Human Assembly ELISA Kit	96 well
5337	REG4 Human Assembly ELISA Kit	96 well
5338	Elafin (SKALP) Human Assembly ELISA Kit	96 well
7638	ST2 Human ELISA Kit	96 well
CY-1151	SIRT1/Sir2 Deacetylase Fluorometric Assay Kit	100 assay
CY-8060	S100P ELISA Kit	96 assay
CY-8095	S100A10 ELISA Kit	96 assay

Cancer





Serine/Threonine Kinase Assay Kits

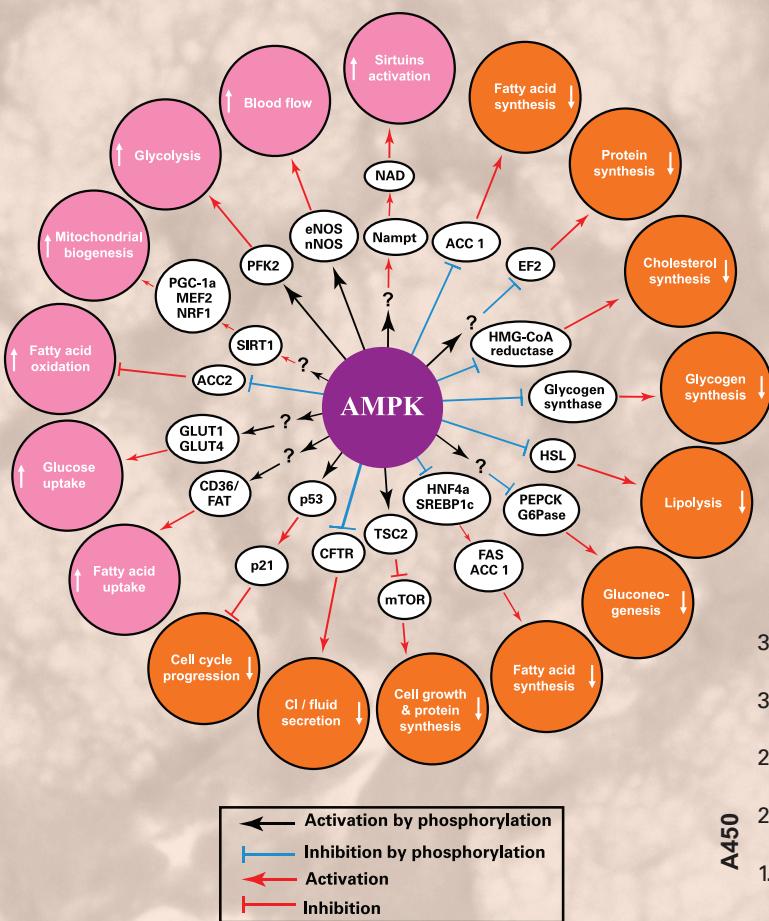
- AKT/PKB
- AMPK
- Aurora
- Aurora family
- CaM Kinase II
- Cdc-Cyclin B
- CK2
- Checkpoint kinase
- cGK
- DYRK2
- IKK α and β
- MAPKAP-Kinase 2
- Human Mps1/TKK
- p38
- PDK1
- Pim-1
- PKC Super Family
- Polo-like Kinase 1
- Polo-like Kinase 2
- Polo-like Kinase 3
- Rho-Kinase

Tyrosine Kinase Assay Kits

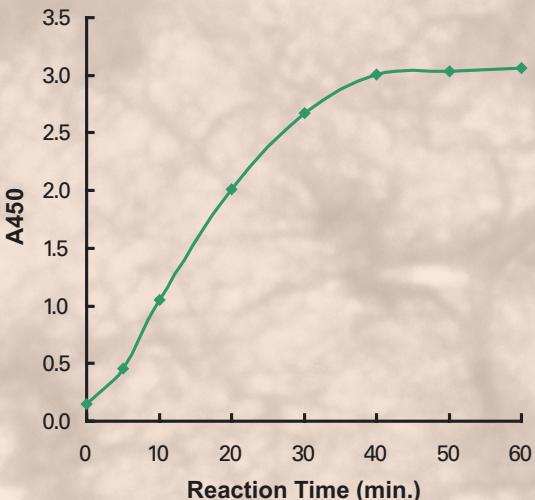
- c-Src
- Eph A2
- FGFR2
- Met
- Lck/p56
- Pyk2
- TrkA
- Wee1

Phosphatase Assay Kits

- Cdc25A
- Cdc25B
- Cdc25C
- Cdc25 Combo
- Cdi/KAP
- LMW-PTP/ACP1
- PTP1B
- TC-PTP



Time course of recombinant AMPK
($\alpha 1 / \beta 1 / \gamma 1$)

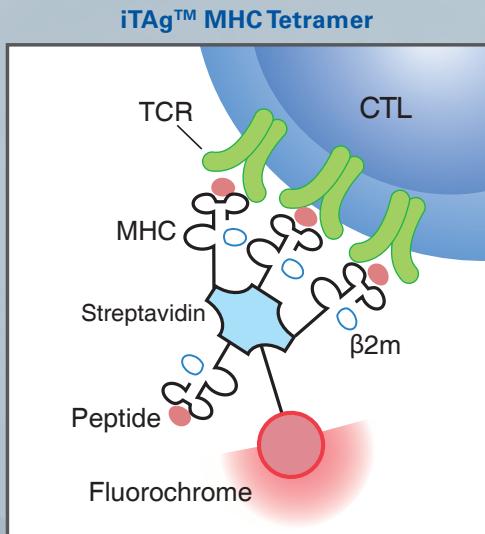


AMP-Activated Protein Kinase (AMPK) regulates cellular energy metabolism by modulating the activity of key enzymes such as acetyl-coenzyme A carboxylase (ACC) and mTOR (mammalian target of rapamycin) in metabolic pathways through their phosphorylation and of transcription factors and cofactors. AMPK stimulates energy-producing pathways (e.g., glucose transport, fatty acid oxidation), and turns off energy-consuming pathways (e.g., protein synthesis, lipogenesis, gluconeogenesis). Adiponectin and leptin as well as hypoglycemic drugs are known as activators of AMPK in adipose tissues. The activation of AMPK occurs upon fasting and exercise which involve changes in the AMP/ATP ratio and the primary upstream liver kinase B1 (LKB1). AMPK is the target of metformin and hormones which improve insulin sensitivity and may serve as the target of pharmaceuticals involved in insulin resistance (type 2 diabetes).

Code No.	Product Name	Size
CY-1161	Cyclic GMP dependent protein kinase (cGK) Assay Kit	96 well
CY-1182	AMP Kinase Assay Kit	96 assay
CY-1173	CaM-Kinase II Assay Kit	96 well
CY-1160	Rho-Kinase Assay Kit	96 well

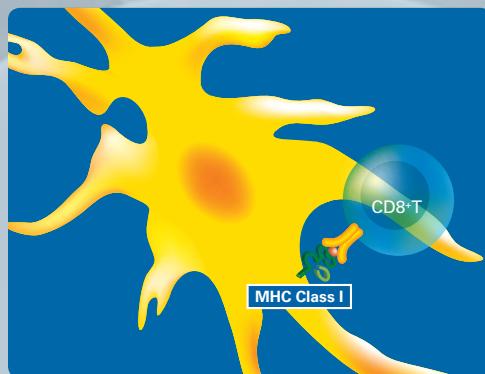
TETRAMER

Tetramer



QUALITY MATTERS

- iTAg™ MHC Tetramers meet the regulatory stability and quality requirements needed for clinical trials
- Manufactured with ISO certified GMP Compliant Procedures



Major Histocompatibility Complex (MHC) tetramer technology utilizes the MHC/peptide complex to detect antigen specific T cells at the single-cell level, thus surpassing detection limits of traditional cell-based methods. MHC tetramer technology is the most accurate method for detection of rare events. The information MHC tetramers provide is pivotal for the direct development of vaccines and therapies, as well as monitoring patient response during clinical trials. To greatly reduce non-specific binding, Class I iTAg™ MHC Tetramers specific to human alleles have a proprietary mutation in the α3 domain (Figure 1).

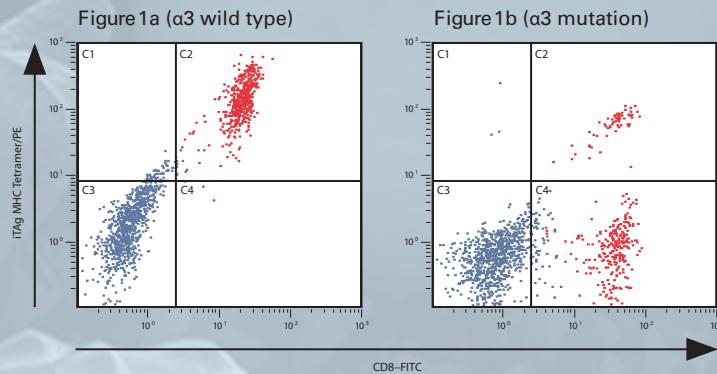


Figure 1: α3 Domain Binding Modification

Demonstrates the “specificity” of iTAg™ MHC Tetramers due to the Class I HLA α3 domain mutation. Figure 1a is without the mutation and Figure 1b is mutated.

CLASS I iTAg™ MHC TETRAMERS

- The only method to detect antigen-specific CD8⁺ T cells *ex vivo*
- Immune responses are targeted to the specific allele(s)
- Time from sample isolation to readout is within hours, not days
- Quantitate tetramer positive CD8⁺ T cells for further functional characterization

CLASS II iTag™ MHC TETRAMERS

CD4⁺ T cells play a role in many diseases, specifically autoimmune. Analysis of these cells has long been hampered by a lack of a suitable assays. MBLI's commitment to meeting clinical research needs is driving the development of Class II tetramers for analysis of CD4⁺ T cells.

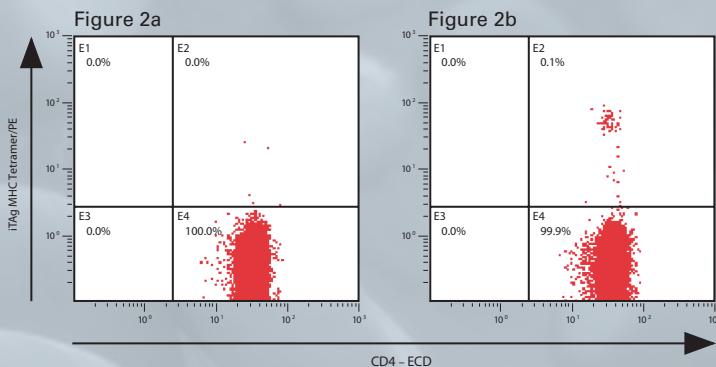
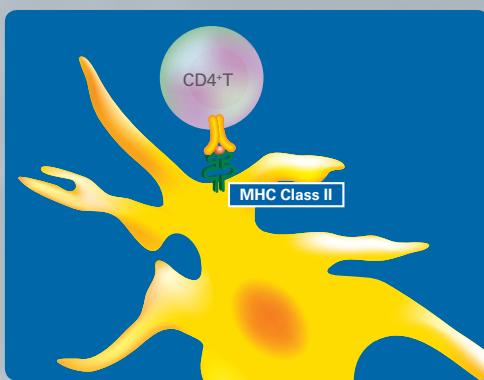


Figure 2: Staining Whole Blood ex vivo

Example of direct whole blood staining with an EBV Class II iTag™ MHC Tetramer. Figure 2a –Irrelevant tetramer. Figure 2b – Positive tetramer.

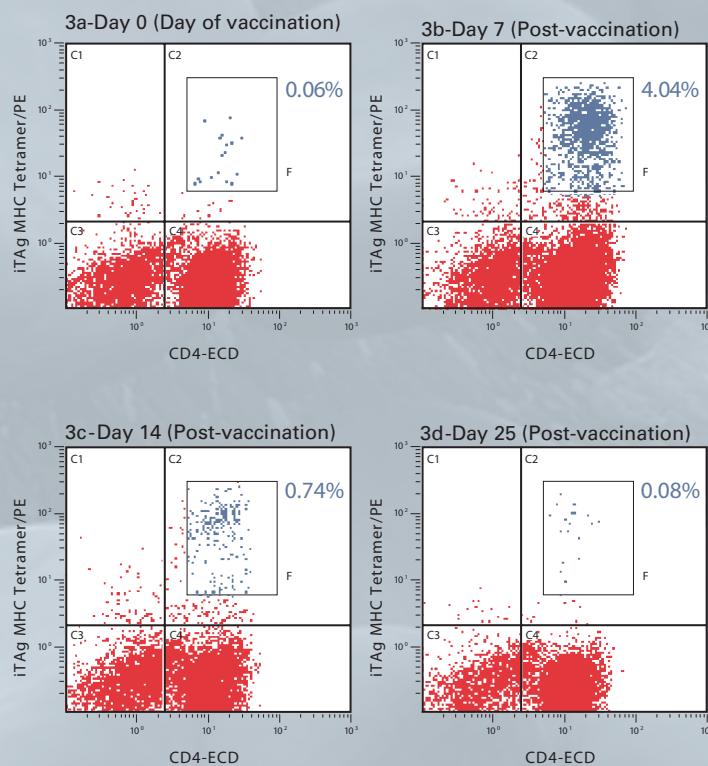


Figure 3a-d: Flu HA_{306-318(307R)}/DR4 iTag™ MHC Tetramer: Monitoring Vaccine Efficacy

Demonstrates immune monitoring and competence with possible utility of Class II iTag™ MHC Tetramers to monitor vaccine efficacy in patients. Plots show four time points from a single donor.

Available Alleles

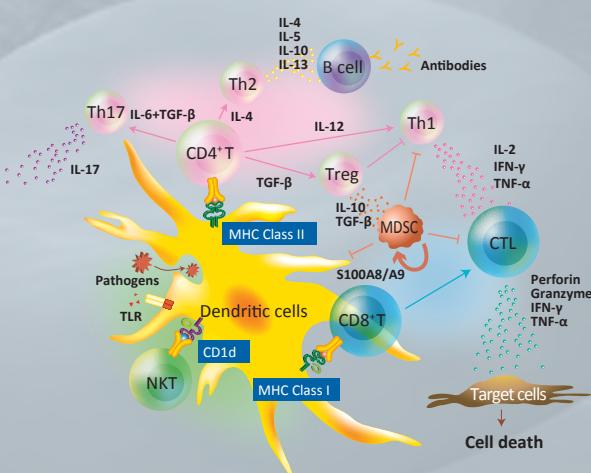
Class I

HLA-A	A*01:01 A*02:01 A*03:01 A*11:01 A*24:02 B*07:02 B*08:01 B*15:01 B*27:05 B*35:01 B*57:01
Mouse	H-2K ^b H-2K ^d H-2D ^b
Rhesus Macaque	Mamu-A*01

Class II

Human	DRB*01:01 DRB*03:01 DRB*04:01 DRB*15:01 DPB*04:01
-------	---

Visit mblintl.com
for regularly updated alleles



iTag™ CMV TETRAMERS

Hematopoietic stem cell transplantation (HSCT) is widely used in the management for a range of diseases in the hematopoietic system. Patients are profoundly immunosuppressed in the early post-transplant period. Reactivation of cytomegalovirus (CMV) remains a significant cause of morbidity and mortality. Current management of HSCT patients involve weekly CMV monitoring and use of preemptive antiviral therapy. This controls viral replication following reactivation or primary CMV infection. CMV tetramer immune monitoring in conjunction with virologic monitoring, can improve CMV patient assessment greater than virologic testing alone.

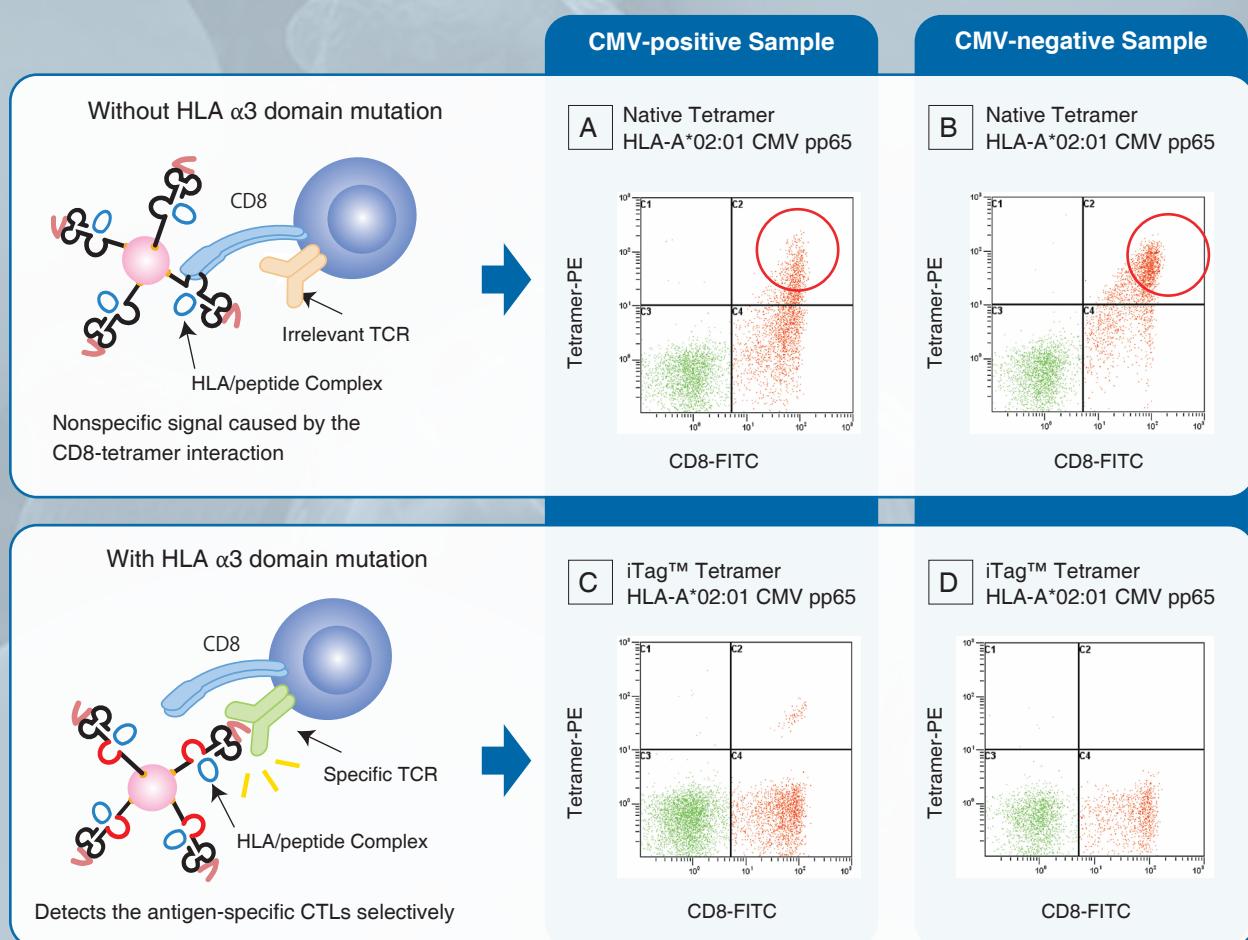
Gratama JW, et al. (2010) Blood 116: 1655–1662

iTag™ MHC TETRAMER

CMV multi-allele contains the following CMV specific tetramer and negative tetramer

- HLA-A*0101 Class I, peptide sequence VTEHDHTLLY (CMV pp50 antigen)
- HLA-A*0201 Class I, peptide sequence NLVPMVATV (CMV pp65 antigen)
- HLA-B*0702 Class I, peptide sequence TPRVTGGGAM (CMV pp65 antigen)
- HLA-B*0801 Class I, peptide sequence ELRRKMMYM (CMV IE-1 antigen)
- HLA-B*3501 Class I, peptide sequence IPSINVHHY (CMV pp65 antigen)
- Negative Tetramer

CMV Tetramer



IMMUNOLOGY

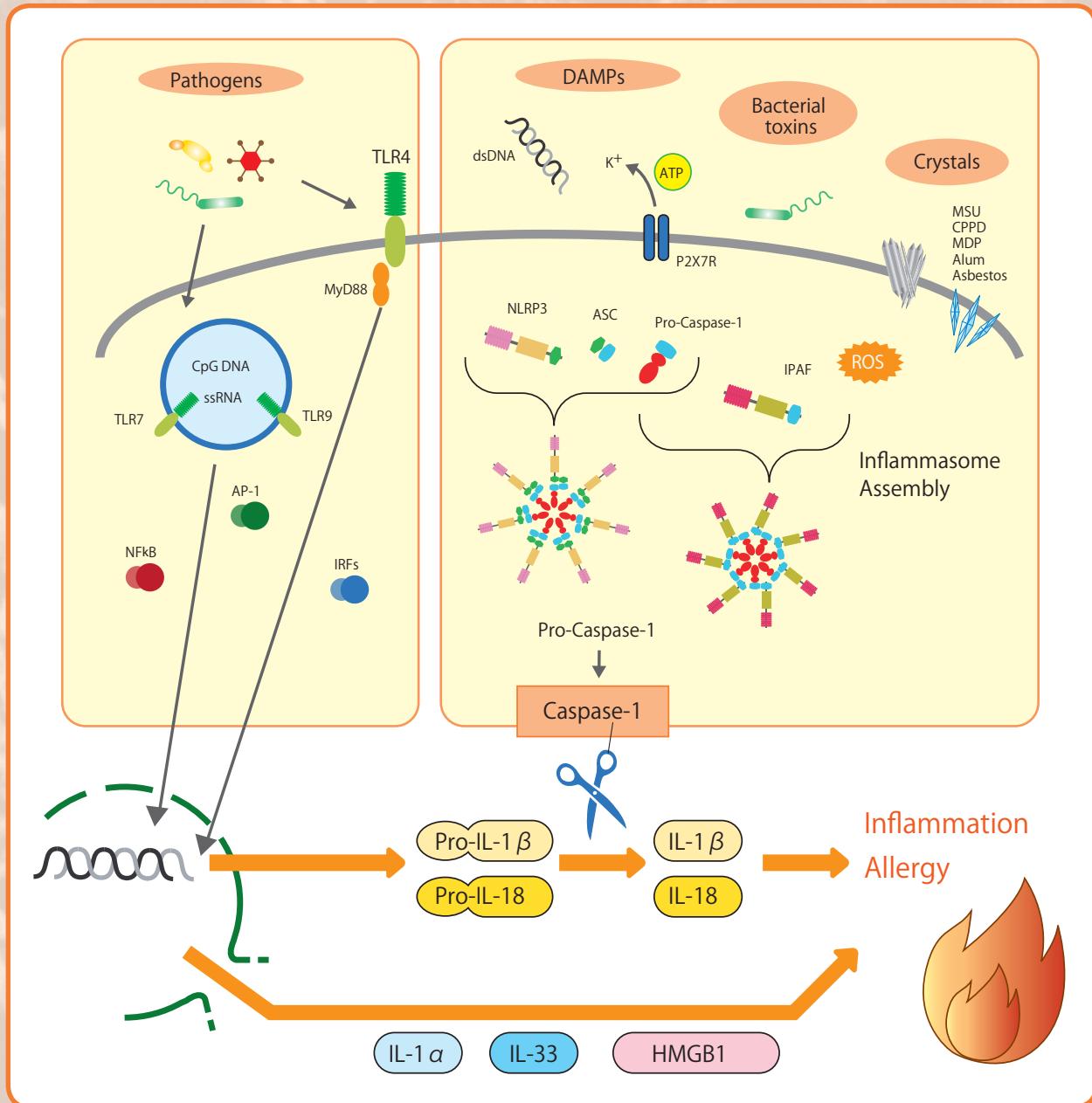
Graft-versus-host disease (GVHD) is a common complication associated with HSCT. GVHD occurs when transplanted immune cells recognize the recipient as "foreign" creating an immune response where the transplanted cells attack the host cells. In addition to providing MHC Tetramers, which can be used to monitor assess CMV risk in transplant patients, MBLI offers several GVHD biomarkers.

GVHD Biomarker	Target Organ	Clinical Significance
CRP	Systemic	C-reactive protein (CRP) can be used as a sensitive systemic marker of inflammation.
Elafin	Skin	Elafin, also known as skin-derived anti-leukoprotease (SKALP), has been utilized as a marker for skin GVHD.
IL-18	Systemic	Interleukin 18 (IL-18) is an 18 kDa cytokine, which is identified as a co-stimulatory factor for production of interferon- γ (IFN- γ).
Lactoferrin	Systemic	Lactoferrin is expressed in most biologic fluids and is a major component of mammalian innate immune system, physiological roles have been proposed for lactoferrin include anti-inflammatory, immunomodulatory, antimicrobial, antiviral and anti-tumoral functions.
REG3α	GI Tract	Regenerating islet-derived REG3 α is membrane protein, which is overexpressed in pancreas. Elevated serum levels have been reported not only in pancreatic cancer, but also in colon and liver cancer. Recently, REG3 α is reported as a plasma marker of GI GVHD.
ST2	Systemic	ST2 was initially detected in the supernatant of myocardial cell culture and thereafter identified as a receptor of IL-33. ST2 is expressed in a variety of cells and tissues. An increase in ST2 in serum has been observed in heart diseases, ulcerative colitis, SLE, pneumonia, sepsis and other diseases.

Code No.	Product Name	Size
CY-8071	High-Sensitivity CRP ELISA Kit	96 assay
5338	Human Elafin (SKALP) assembly ELISA Kit	96 well
7620	Human IL-18 ELISA Kit	96 well
CY-8089	Human Lactoferrin ELISA Kit	96 assay
5323	Human PAP1 (REG3 α) assembly ELISA Kit	96 well
7638	ST2 ELISA Kit	96 well



RECOGNITION PATHWAY OF DANGER SIGNALS IN INFLAMMATORY RESPONSE



Interleukin-18 (IL-18) is a cytokine produced by dendritic cells, monocytes, macrophages, neutrophils, and epithelial cells. Th1-type immunoreactions are facilitated primarily by IL-18. Furthermore, action of IL-18 on basophils and mast cells cause complex physiological responses, including allergic reactions. High levels of IL-18 are detected in the blood of patients with allergic and autoimmune diseases. IL-18 is also found in the urine of patients with acute renal disorder and mediates the progression of type 2 diabetes.

Code No.

7620

7625

7630

RG-7618EC-D*

Product Name

Human IL-18 ELISA Kit

Mouse IL-18 ELISA Kit

EDN ELISA Kit

ECP ELISA Kit

Size

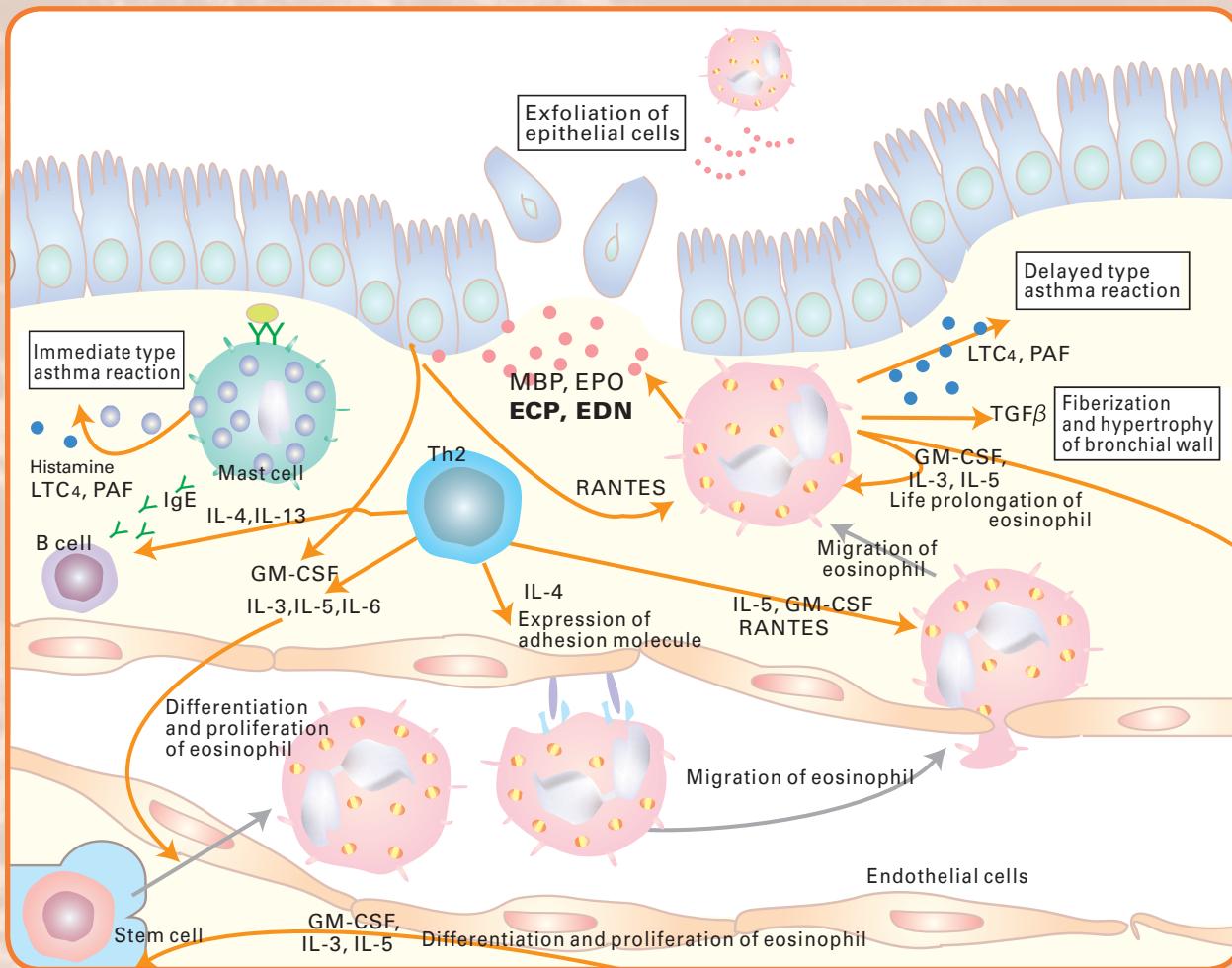
96 well

96 well

96 well

96 well

BRONCHIAL ASTHMA AND EOSINOPHIL



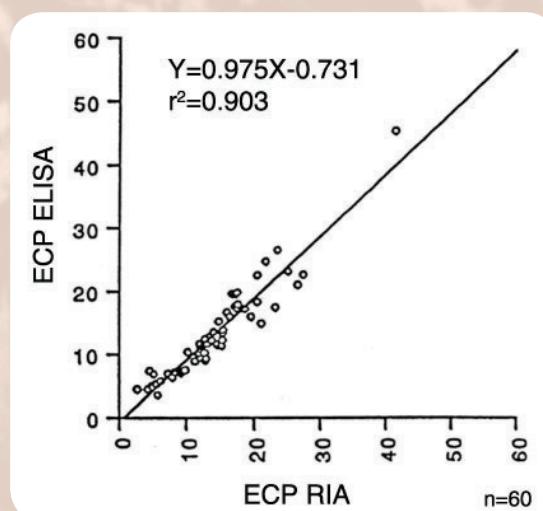
Eosinophil Cationic Protein (ECP), Eosinophil Derived Neurotoxin (EDN) and Major Basic Protein (MBP) are known to be major protein-mediators derived from activated eosinophils. Activated eosinophils play an important role in inflammatory processes especially in allergic diseases. The levels of eosinophil activation can serve as complimentary data for monitoring asthma inflammation. As ECP/EDN proteins are secreted from activated eosinophils, they become markers of eosinophil activation and degranulation which can cause inflammatory disease of the airways.

ECP

- No cross reactivity with EDN
- For use with human serum samples

EDN

- No cross reactivity with ECP
- For use with human serum samples

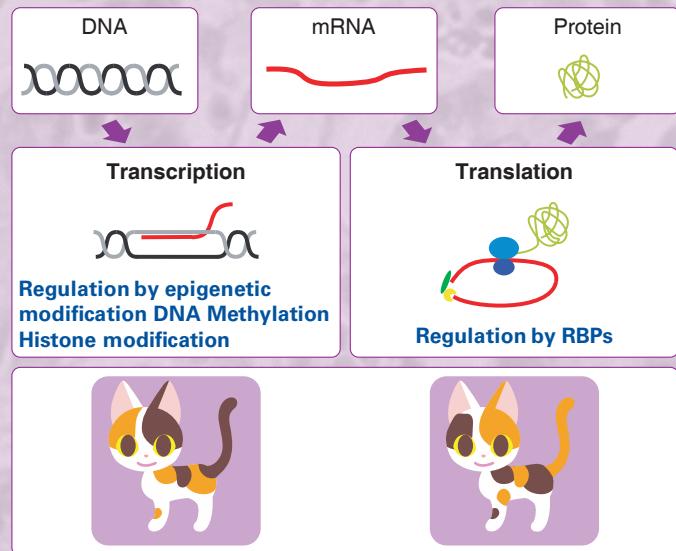


MBD1-BASED METHYLATED DNA ENRICHMENT KIT

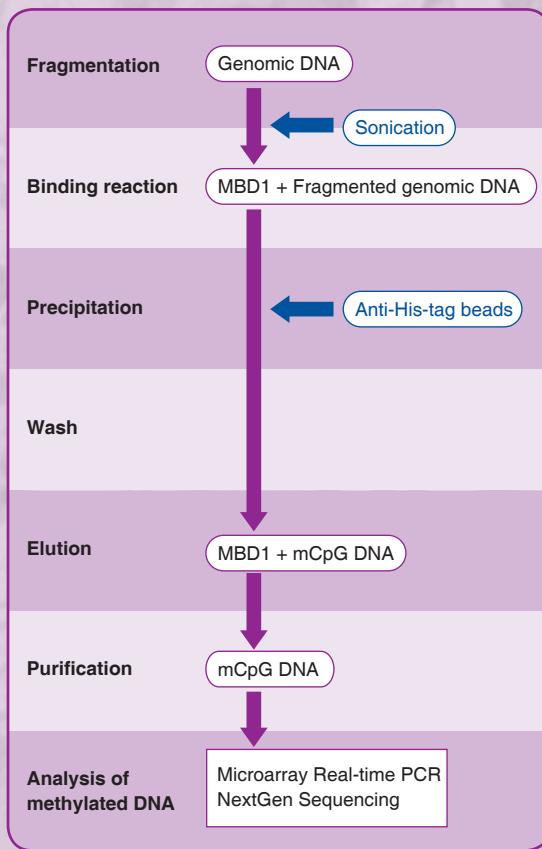
- High enrichment efficiency
- Consistent enrichment throughout genome loci
- Quick and easy protocol

MBD1 binds to methylated CpG DNA through its N-terminus MBD.

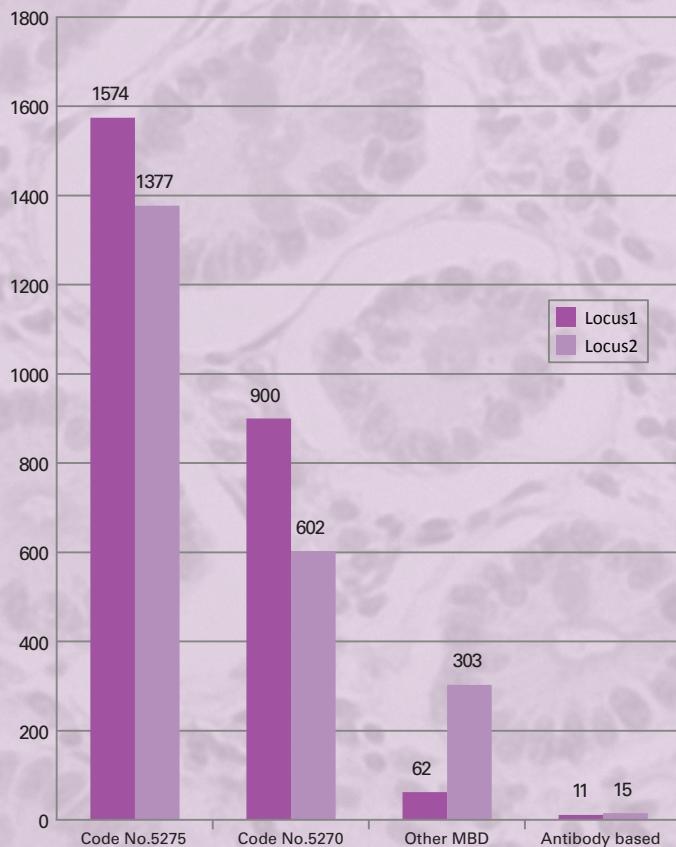
MethylHunter™ DNA Enrichment Kit enriches DNA fragments containing methylated CpG DNA by using recombinant His-tagged MBD1.



Procedure Summary



Relative Copy Number



Code No.

5270

MethylHunter MBD1-based Methylated DNA Enrichment Kit

5275

MethylHunter MBD1-based Methylated DNA Enrichment with beads

Product Name

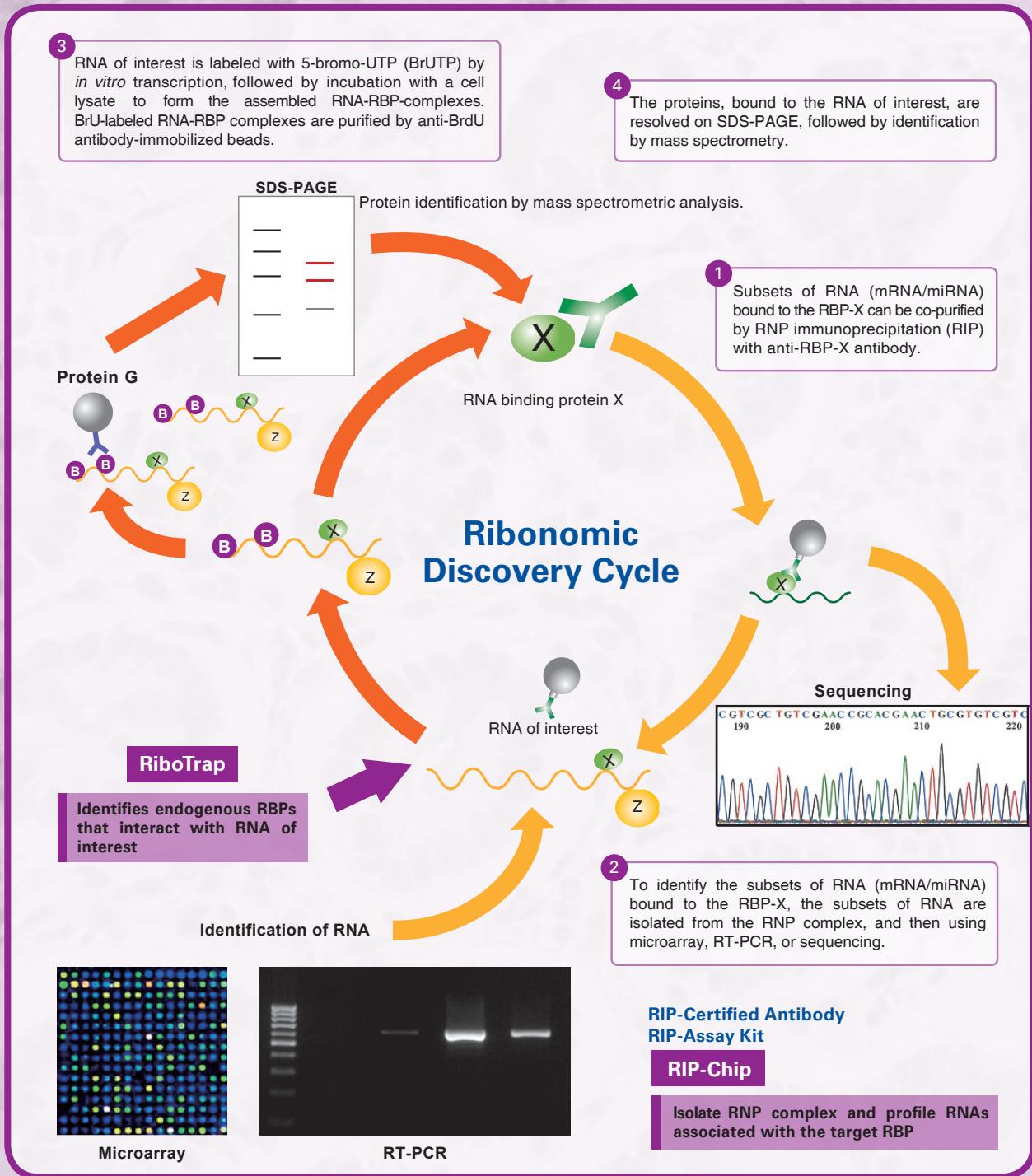
Size

25 test

25 test

Post-transcriptional regulation of gene expression is important in most cellular processes.
RNP complexes are the fundamental units of post-transcriptional regulation of mRNA.
RNA molecules, including mRNA and non-coding species such as microRNA (miRNA),
exist in RNP complexes with specific RNA-binding proteins (RBPs).

RIBONOMICS DISCOVERY CYCLE



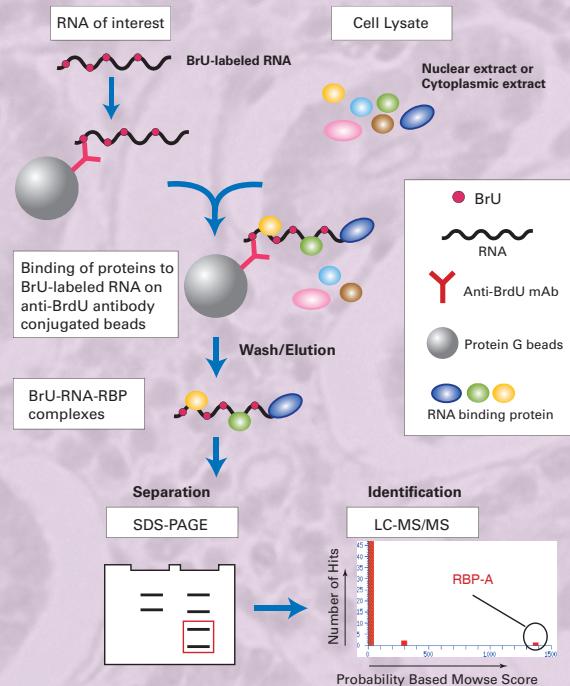
Reference: Dale L. Beach and Jack D. Keene, Methods Mol. Biol., 419:69-91. (2008)

DISCOVER RNA BINDING PROTEINS

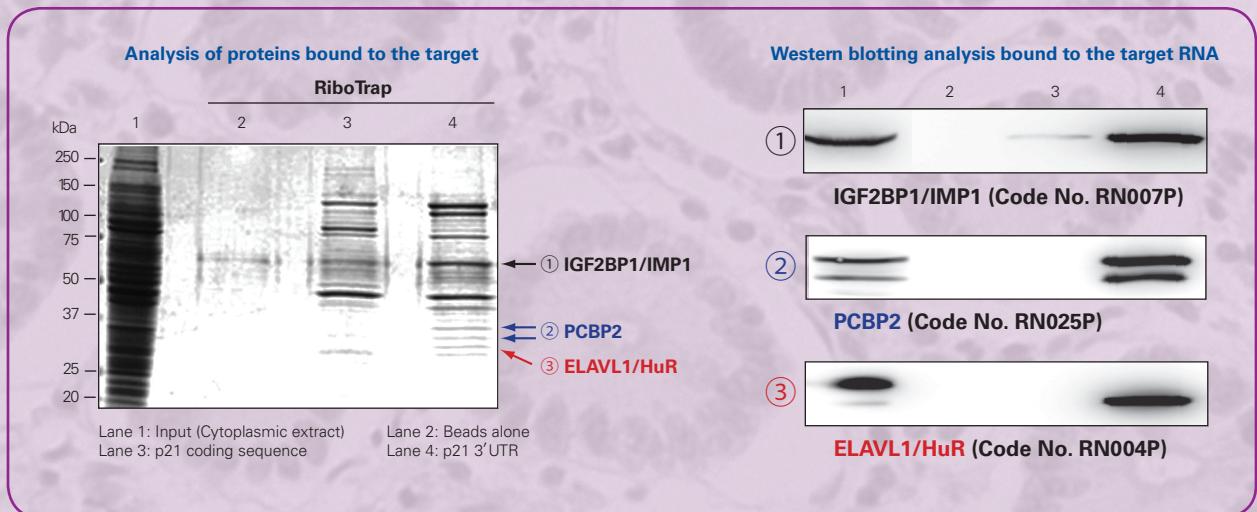
- Immunoaffinity method to explore RNA proteins and RNA-RNA interactions
- Reliable method to describe the endogenous assembly of ribonucleoproteins
- Identify regulatory components in biosynthesis of small RNA and non-coding RNA

ADVANTAGE OF THE KIT

- RNA of interest can be analyzed using, cytoplasm or nuclear fraction



Example of RiboTrap™ Experiment



BrU-labeled 3'UTR of p21 mRNA was incubated with cytoplasmic fraction of HEK293T cells to form mRNA-protein complex followed by immunoaffinity purification using anti-BrdU antibody. Bands ①, ② and ③ are identified to be IGF2BP1/IMP1, PCBP2 and HuR by LC-MS/MS.

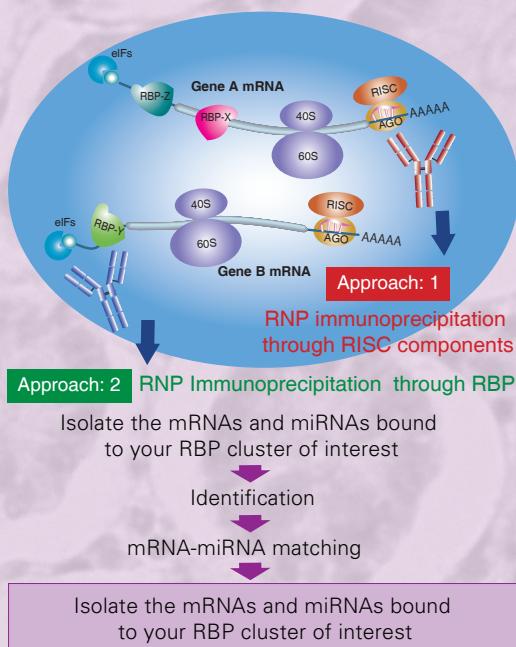
Code No.
RN1011/RN1012

Product Name
RiboTrap Kit

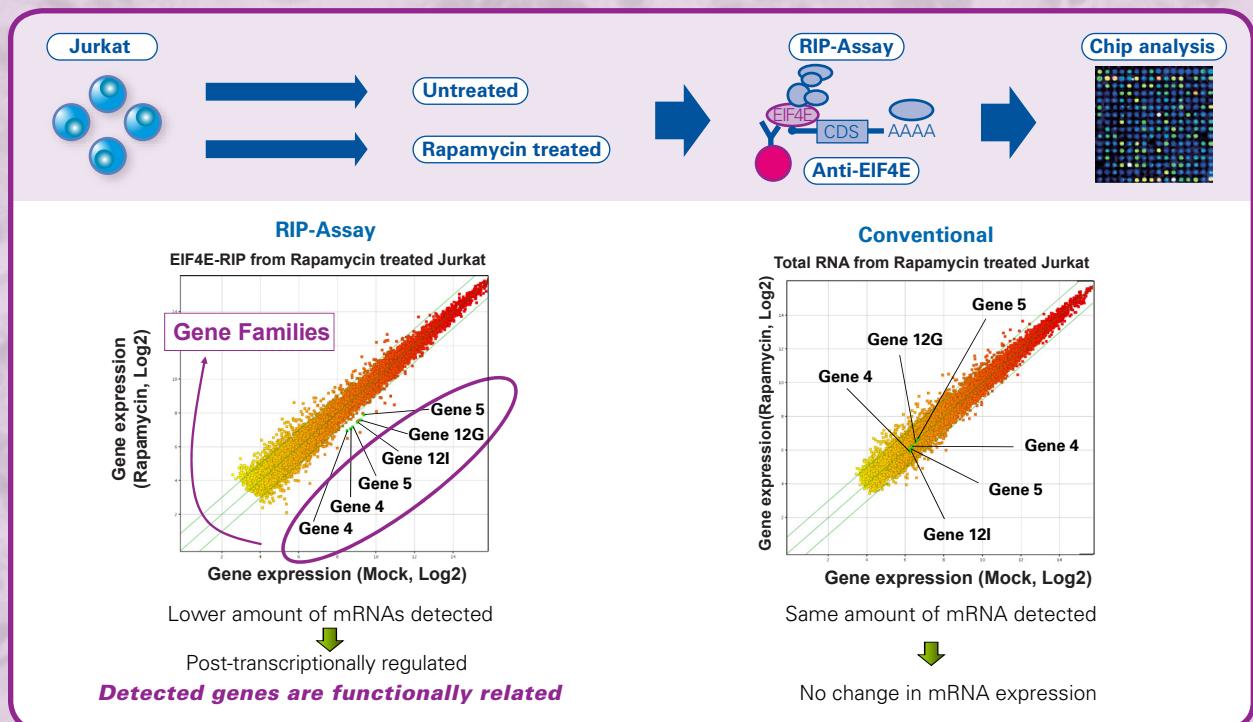
Size
10 assay

RIP-Assay™ Kit

- Analyze intact RBP-mRNA complexes
- Identify miRNAs bound to mRNA targets
- Analyze the maturation mechanism of miRNA
- Identify RISC components and analyses their function
- Identify functionally related RNA libraries



RIP-Assay Example



Code No.
RN1001
RN1005
RN004P
RN002P
RN001P
RN003M

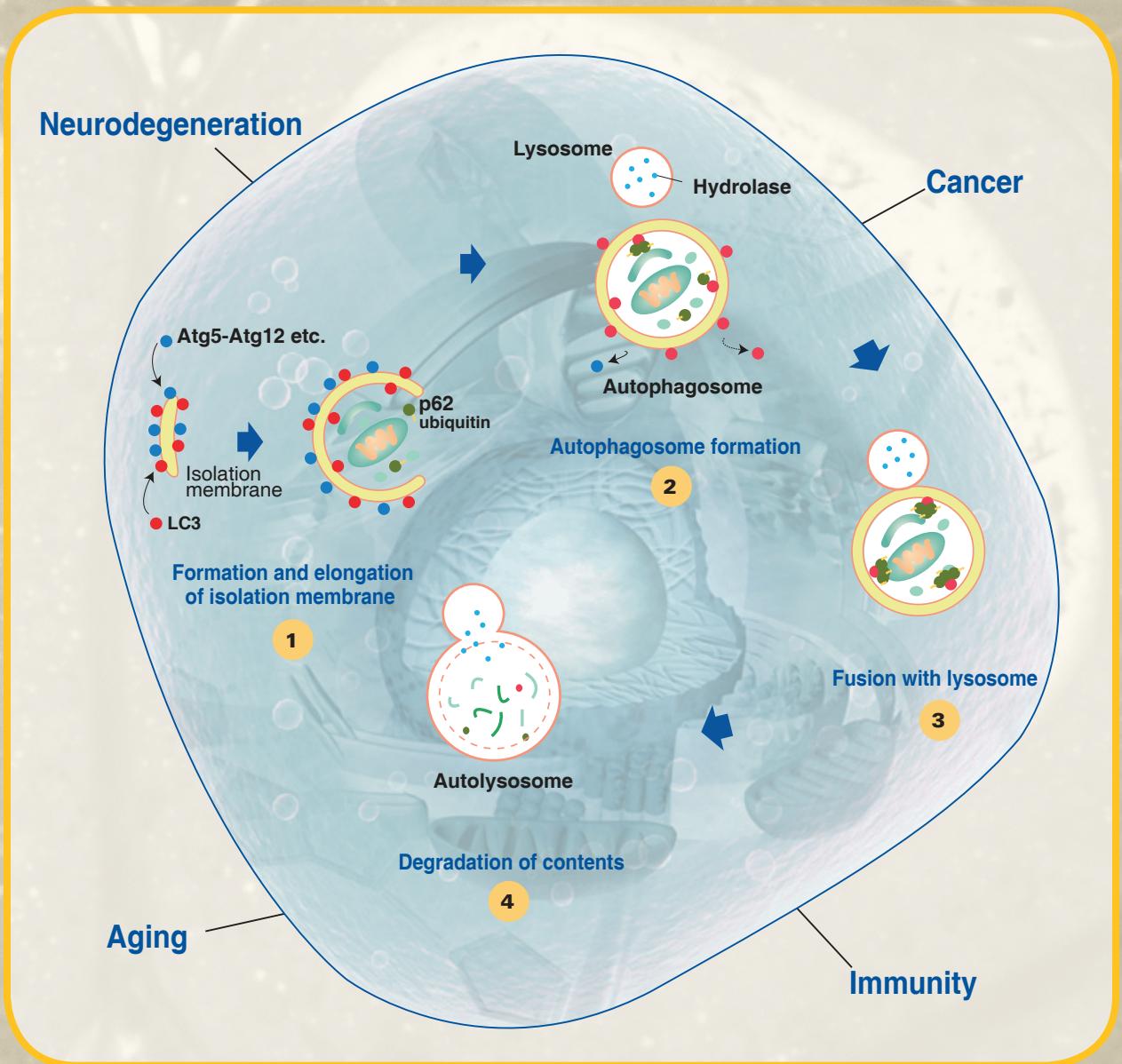
Product Name
RIP-Assay Kit
RIP-Assay Kit for microRNA
Anti-ELAVL1 (HuR) (Human) pAb
Anti-EIF4G1 (Human/Mouse) pAb
Anti-EIF4E (Human) pAb
Anti-EIF2C2 (AGO2) (Human) mAb

Size
10 assay
10 assay
200 µL
200 µL
200 µL
200 µL



AUTOPHAGY

Autophagy is a cellular self-digestion process for the purpose of providing nutrients to enable cells to survive starvation. Autophagy plays an important role in maintaining the cell homeostasis by removing cellular components that have degraded. Recent research has also shown an association of mammalian autophagy with pathological conditions including neurodegenerative diseases, infection, cardiac disease, cancer and aging.



AUTOPHAGY PROCESS

1. Autophagy is initiated by the formation of double membrane bound autophagosomes.
2. The autophagosome elongates around the cellular components.
3. After the autophagosome formation is complete, it fuses with a lysosome (autolysosome).
4. Autolysosome digests the components.

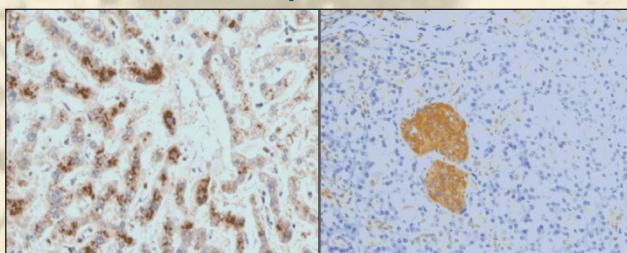
IMPORTANCE OF LC3 IN AUTOPHAGY

LC3 plays an integral role as an autophagosome maker, because it resides in the entire process of autophagosome formation. Upon autophagy induction, LC3-I, a small and soluble cytoplasmic protein, is conjugated with a phospholipid which anchors it to the autophagosomal membrane as LC3-II. Autophagy can be induced by nutrient deprivation. Our polyclonal and monoclonal antibodies can be used to quantify LC3-I and LC3-II levels within the cell.

• LC3 Polyclonal (Code No. PM036)

WB IPP ICC IHC FCM

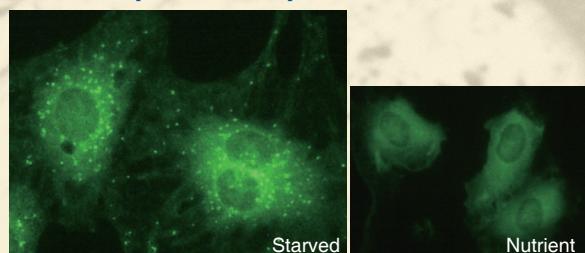
Immunohistochemistry



Normal human liver

Normal human pancreas

Immunocytochemistry



NRK cells

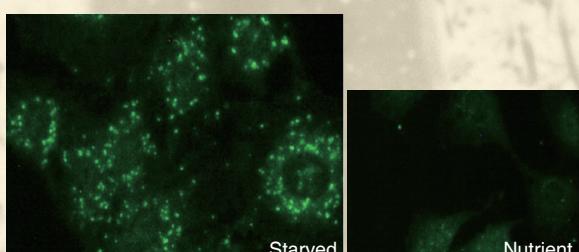
Nutrient

Starved

• LC3 Monoclonal (Clone: 4E12, Code No. M152-3)

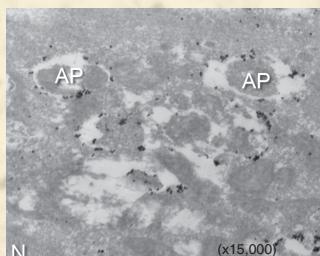
WB IPP ICC FCM ImmunoEM

Immunocytochemistry



NRK cells

Immuno EM *



MEF cells (Starved)

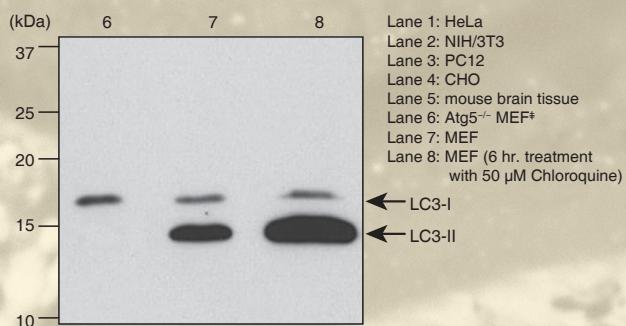
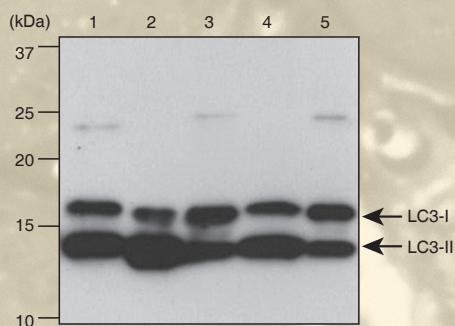
EM: Electron Microscopy
AP: Autophagosome
N: Nucleus

* The image is provided by courtesy of Prof. Noboru Mizushima, M.D., Ph.D., Tokyo Medical and Dental University

• LC3 Monoclonal (Clone: 8E10, Code No. M186-3)

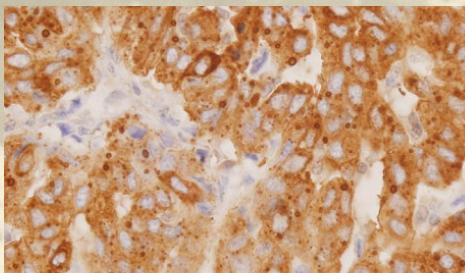
WB

Western blotting

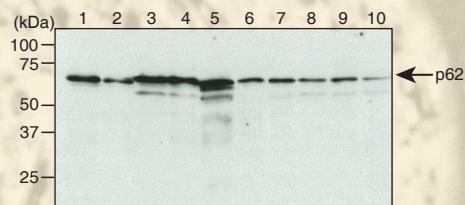


[#] Atg5^{-/-} MEF Cell line is provided by courtesy of Prof. Noboru Mizushima, M.D., Ph.D., Tokyo Medical and Dental University

Human Liver Carcinoma
(Code No. PM045)

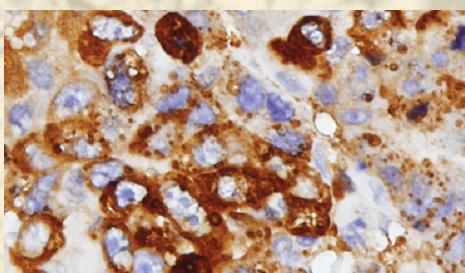


Western Blot Analysis of p62
(Code No. PM066)

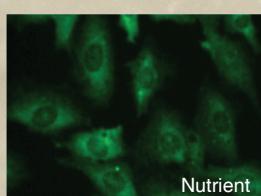
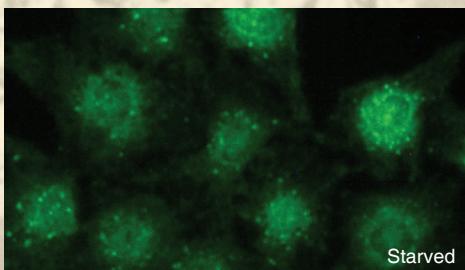


Lane 1: HeLa Lane 7: Mouse brain
 Lane 2: 293T Lane 8: Mouse liver
 Lane 3: MEF Lane 9: Mouse spleen
 Lane 4: NIH/3T3 Lane 10: Mouse kidney
 Lane 5: PC12
 Lane 6: CHO

Human Liver Carcinoma
(Code No. M162-3)



Immunocytochemical detection of p62
(Code No. M162-A48)

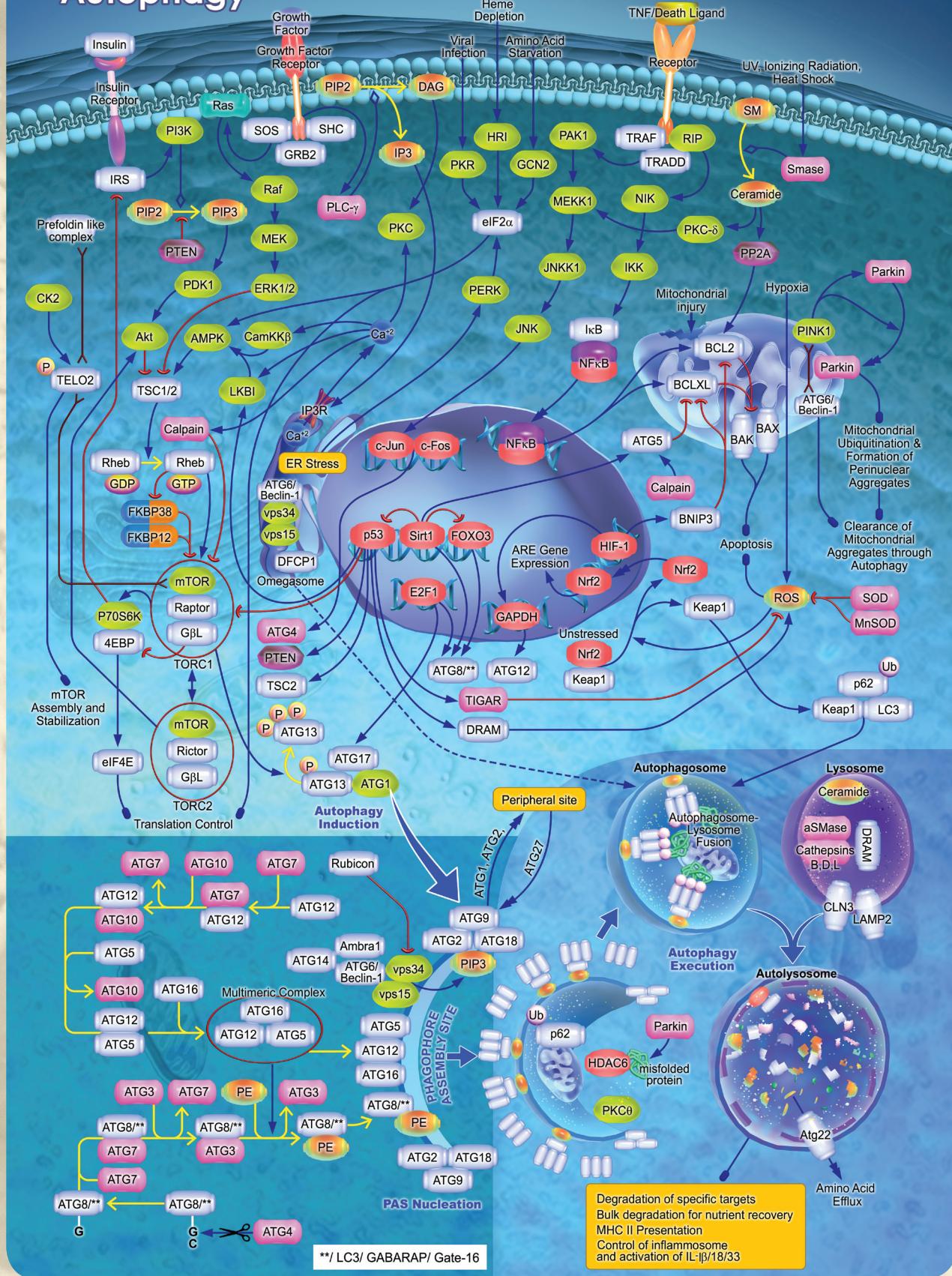


Target	Applications					Stage			
	ICC	IHC	WB	IP	FCM	Initiation	Elongation	Closure	Maturation/ Degradation
Atg2A	X	X		X		X			
Atg3	X	X		X		X			
Atg4B	X						X		
Atg5	X					X			
Atg7	X			X		X			
Atg9A	X	X		X		X			
Atg10	X		X*			X			
Atg12	X	X		X		X			
Atg13	X			X		X			
Atg14	X			X		X			
Atg16L	X	X		X		X			
Beclin 1	X	X	X*	X		X			X
GABARAP	X	X	X						X
GATE-16	X		X						X
LC3	X	X	X	X	X	X	X	X	X
NRF2	X	X	X	X			X		
p62/SQSTM1	X	X	X	X	X		X		
Rubicon	X			X					X
Tel2	X			X		X			
UVRAG	X					X			
VMP1	X			X		X			
Ubiquitin	X	X*	X*						

*Sample Sizes Available

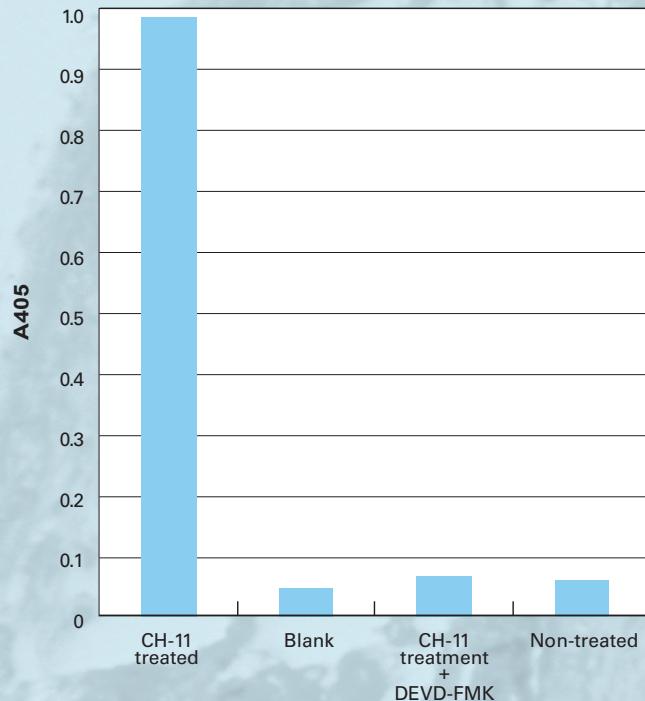


Autophagy

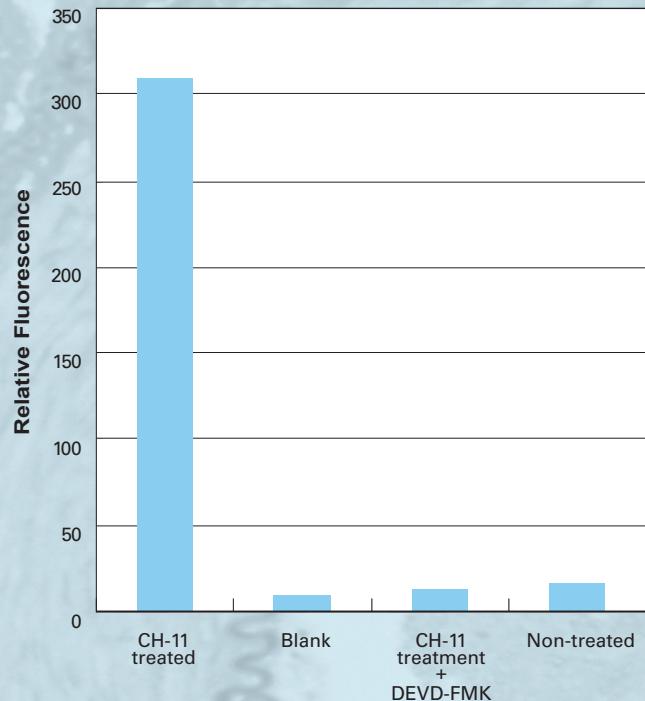


APOPTOSIS DETECTION KITS

Caspase Activity Measurement Kits

Caspase-3 Colorimetric Assay

(Code No. 4800)

Caspase-3 Fluorometric Assay

(Code No. 4815)

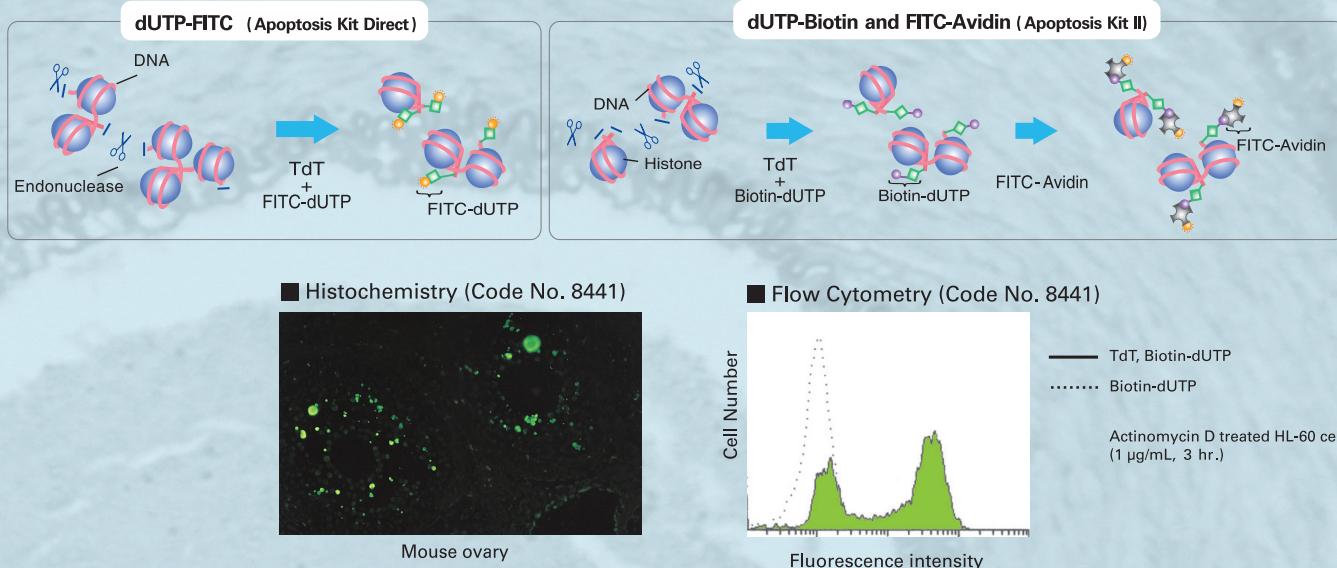
Cell: Jurkat
 Caspase-3 activator: anti-Fas/CD95 (clone CH-11)
 Caspase-3 inhibitor: DEVD-FMK

- **High sensitivity measurement using fluorescent plate reader**
- **Measure caspase activites in cell lysate**
- **Including assay standard and caspase inhibitor**

Code No.	Product Name	Size
4690	Annexin V-Azami-Green Apoptosis Detection Kit	100 assay
4800	Caspase-3 Colorimetric Assay Kit	100 assay
4815	Caspase-3 Fluorometric Assay Kit	100 assay
4805	Caspase-8 Colorimetric Assay Kit	100 assay
4820	Caspase-8 Fluorometric Assay Kit	100 assay
4810	Caspase-9 Colorimetric Assay Kit	100 assay
4825	Caspase-9 Fluorometric Assay Kit	100 assay
CY-1250	Cathepsin S Fluorometric Assay Kit	100 assay
4700	Apoptosis Kit	100 assay
8445	Apoptosis Kit Direct	66(FCM)/40(IHC)
8441	Apoptosis Kit-II	66(FCM)/40(IHC)

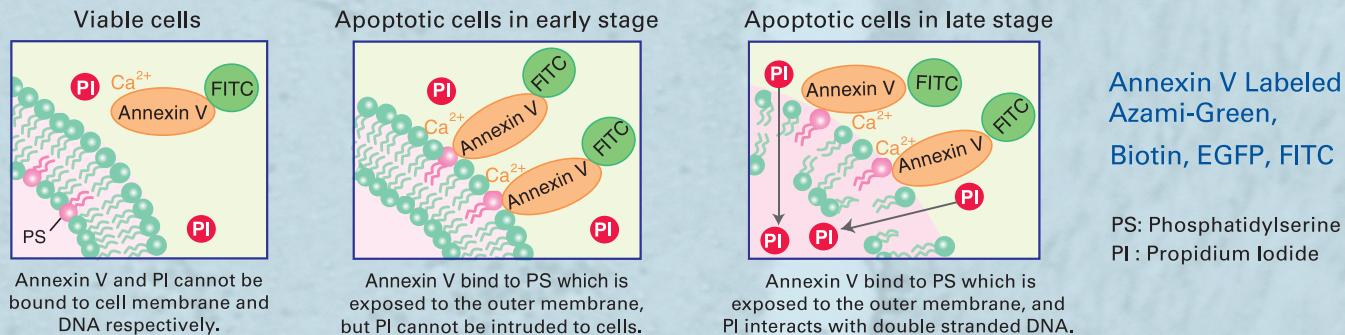
TUNEL-Based Detection Kits

Principle for detection of DNA fragmentation

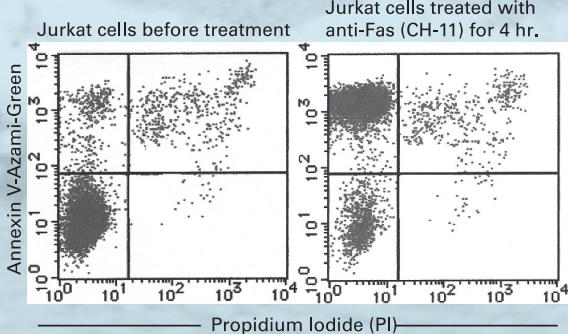


Annexin V Apoptosis Detection Kit

Principle of Apoptosis Kit



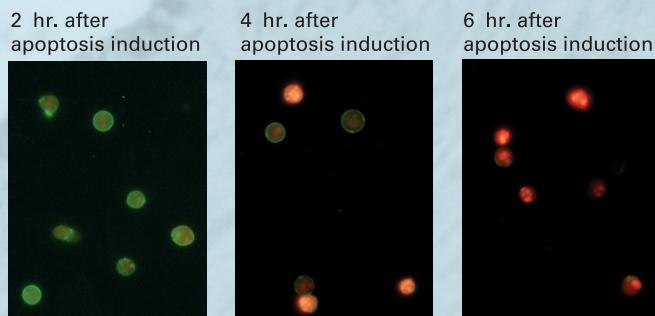
Flow Cytometry



Lower left (AnnexinV/PI⁻) : Viable cells
Upper left (AnnexinV/PI⁻) : Apoptotic cells in early stage
Upper right (AnnexinV/PI⁺) : Apoptotic cells in late stage or Necrotic cells

(Code No. 4690)

Cytochemistry (double staining of FITC-Annexin V and PI)



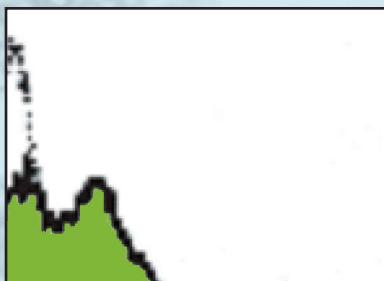
ANTIBODIES

- **Fas**
- **MFG-E8**
- **VDUP-1**
- **Over 600 additional products available**

APPLICATIONS

- **WB**
- **FCM**
- **IPP**
- **IHC**
- **ICC**

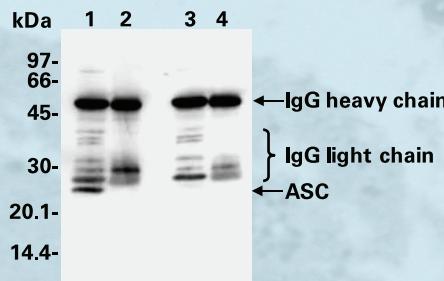
Anti-Fas/CD95 mAb



Flow cytometric analysis of human Fas expression on normal human lymphocyte. Open histogram indicates the reaction of isotypic control to the cells. Shaded histogram indicates the reaction of MD-11-3 to the cells.

(Code No. MD-11-3)

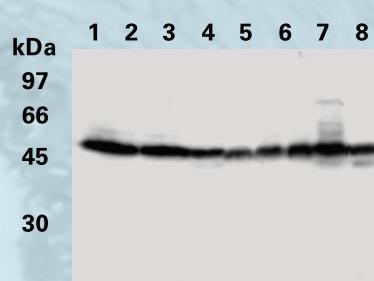
Anti-ASC mAb



Immunoprecipitation of ASC from HL-60 with D086-3 (1,3) and normal mouse IgG (2,4). After immunoprecipitated with the antibody, immunocomplex was resolved on SDS-PAGE and immunoblotted with D086-3 (1,2) or normal mouse IgG (3,4).

(Code No. D086-3)

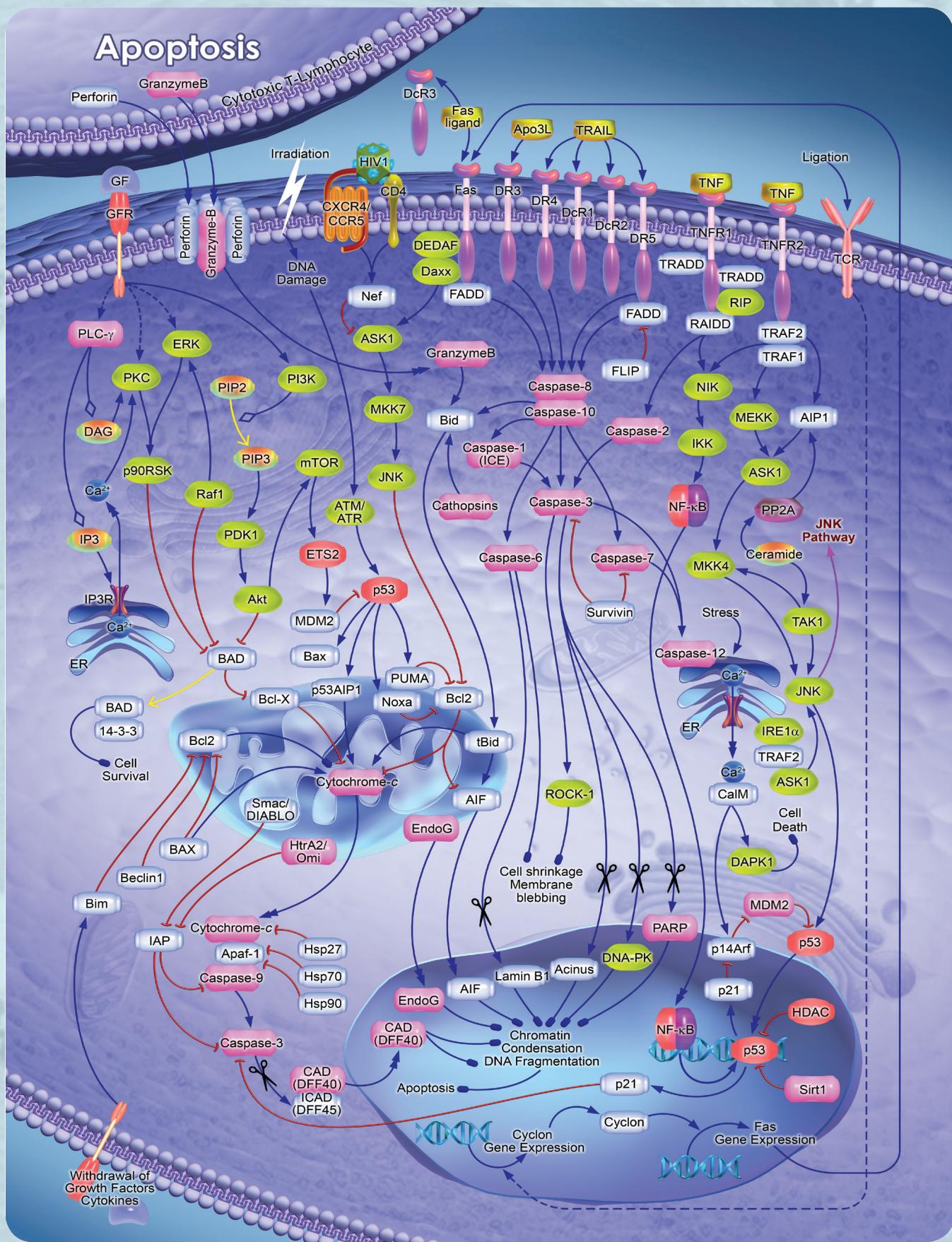
Anti-VDUP1/Txnip mAb



Western blot analysis of Txnip/VDUP1 expression in Raji (1), K562 (2), KG1 (3), MRC5 (4), IC2Tr (5), HEL (6), P19 (7), and WR19L (8) using K0205-3.

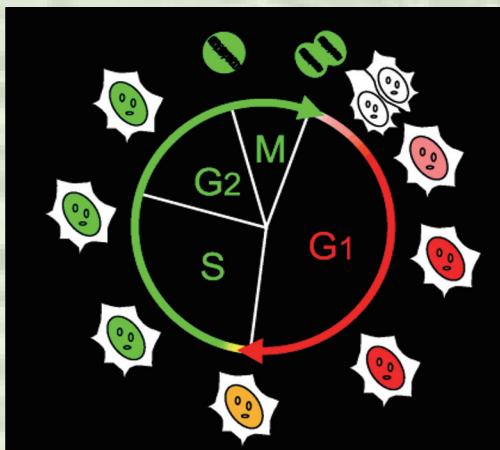
(Code No. K0205-3)

Code No.	Product Name	Clone No.	Species Reactivities	Application	Size
M009-3	Amyloid Precursor Protein	3E9	Hu, Mo	WB	100 µg
D086-3	ASC	23-4	Hu	WB, IPP, ICC, IHC	100 µg
M029-3	Caspase-4	4B9	Hu	WB	100 µg
M059-3	Caspase-10	4C1	Hu	WB	100 µg
M070-3	Caspase-6	3E8	Hu, Rt	WB, ICC	100 µg
M032-3	Caspase-8	5F7	Hu	WB	100 µg
M054-3	Caspase-9	5B4	Hu, Mo, Rt	WB	100 µg
D230-3	CD274/PD-L1	27A2	Hu	FCM, IHC	100 µg
D092-3	CD274/PD-L1	MIH3	Hu	FCM	100 µg
SY-001	Fas/CD95	CH-11	Hu	WB, FCM	50 µg
MD-11-3	Fas/CD95	ZB4	Hu	WB, FCM, NT	100 µg
K0020-1	Granulocytes	BM-2	Hu	IHC	200 µL
D199-3	MFG-E8	18A2-G10	Mo	WB, IHC	100 µg
D161-3	MFG-E8	2422	Mo	FCM, IPP	100 µg
D031-3	Proton pump	1H9	Hu, Mo, Rt, Bo	WB, IPP, IHC	100 µg
K0179-3	SREBP-1	2A4	Hu	WB, IPP	100 µg
K0205-3	VDUP1/Txnip	JY2	Hu, Mo	WB, IPP, IHC	100 µg
M044-3	XIAP	2F1	Hu, Mo, Rt	WB	100 µg



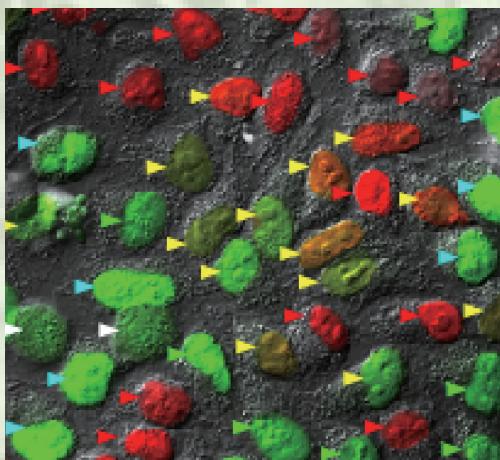
FLUORESCENT PROTEINS

FUCCI



Visualizing the cell cycle:

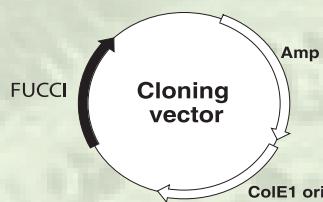
Schematic representation of the fluorescence observed in FUCCI-transfected cells over the cell cycle phases. An orange fluorescent protein marks nuclei in G₁ (shown in red), while a green fluorescent protein marks nuclei in S, G₂ and M in green.



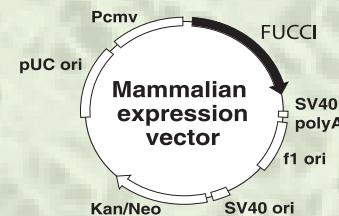
HeLa cells stably expressing FUCCI-G₁ Orange and FUCCI-S/G₂/M Green. FUCCI effectively labels individual nuclei in G₁ phase orange and those in S/G₂/M phase green.

Images courtesy of: Dr. Asako Sakaue-Sawano and Dr. Atsushi Miyawaki Laboratory for Cell Function and Dynamics, Advanced Technology Development Group, Brain Science Institute, RIKEN; Life Function Dynamics, ERATO, JST. These images were obtained using the stable cell line in reference (Sakaue-Sawano, A., et al., Cell 132, 487-498 (2008), obtained with modification of Amalgaam products.

Data obtained by: Using the stable cell lines in reference (Sakaue-Sawano, A., et al., Cell 132, 487-498 (2008), obtained with modification of Amalgaam products.



pFUCCI-G₁ Orange (AM-V9001)
pFUCCI-S/G₂/M Green (AM-V9014)



pFUCCI-G₁ Orange (AM-V9003)
pFUCCI-S/G₂/M Green (AM-V9016)

- Used for imaging the spatiotemporal patterns of cell cycle dynamics
- FACS - Sort your cells by cell cycle phase
- In Vivo analysis

FUCCI (Fluorescent Ubiquitination-based Cell Cycle Indicator) is a set of fluorescent probes which enable the visualization of cell cycle progression in living cells. FUCCI takes advantage of the fact that the replication licensing factors Cdt₁ and Geminin are only present during specific phases of the cell cycle. A fusion protein of a fragment of Cdt₁ (amino acids 30-120) with the fluorescent protein monomeric Kusabira-Orange 2 (mKO₂) serves as an indicator of G₁ phase, while a fusion protein of a fragment of Geminin (amino acids 1-110 or 1-60) with the fluorescent protein monomeric Azami-Green 1 (mAG₁) visualizes S, G₂ and M phase. The cell cycle indicator takes advantage of the highly selective, rapid degradation of the replication licensing factors, mediated by the ubiquitin-proteasome system.

Code No.

AM-VS0601
AM-VS0605
AM-VS0607
AM-VS0608

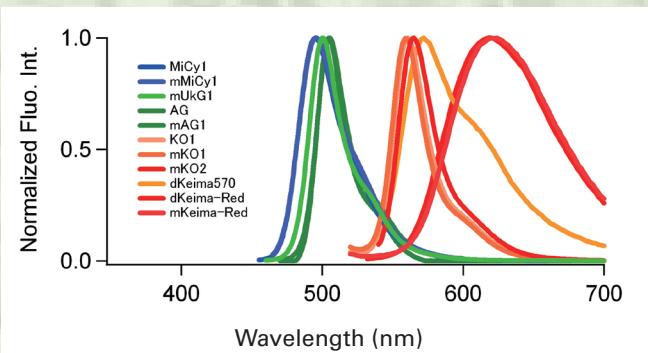
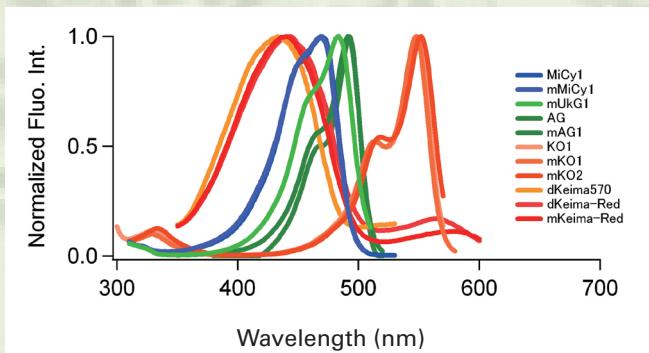
Product Name

FUCCI Cloning vector set (G₁ Orange + S/G₂/M Green)
FUCCI Cloning vector set (G₁ Orange + S/G₂/M Green(N+C))
FUCCI Expression vector set (G₁ Orange + S/G₂/M Green-Hyg)
FUCCI Expression vector set (G₁ Orange + S/G₂/M Green (N+C)-Hyg)

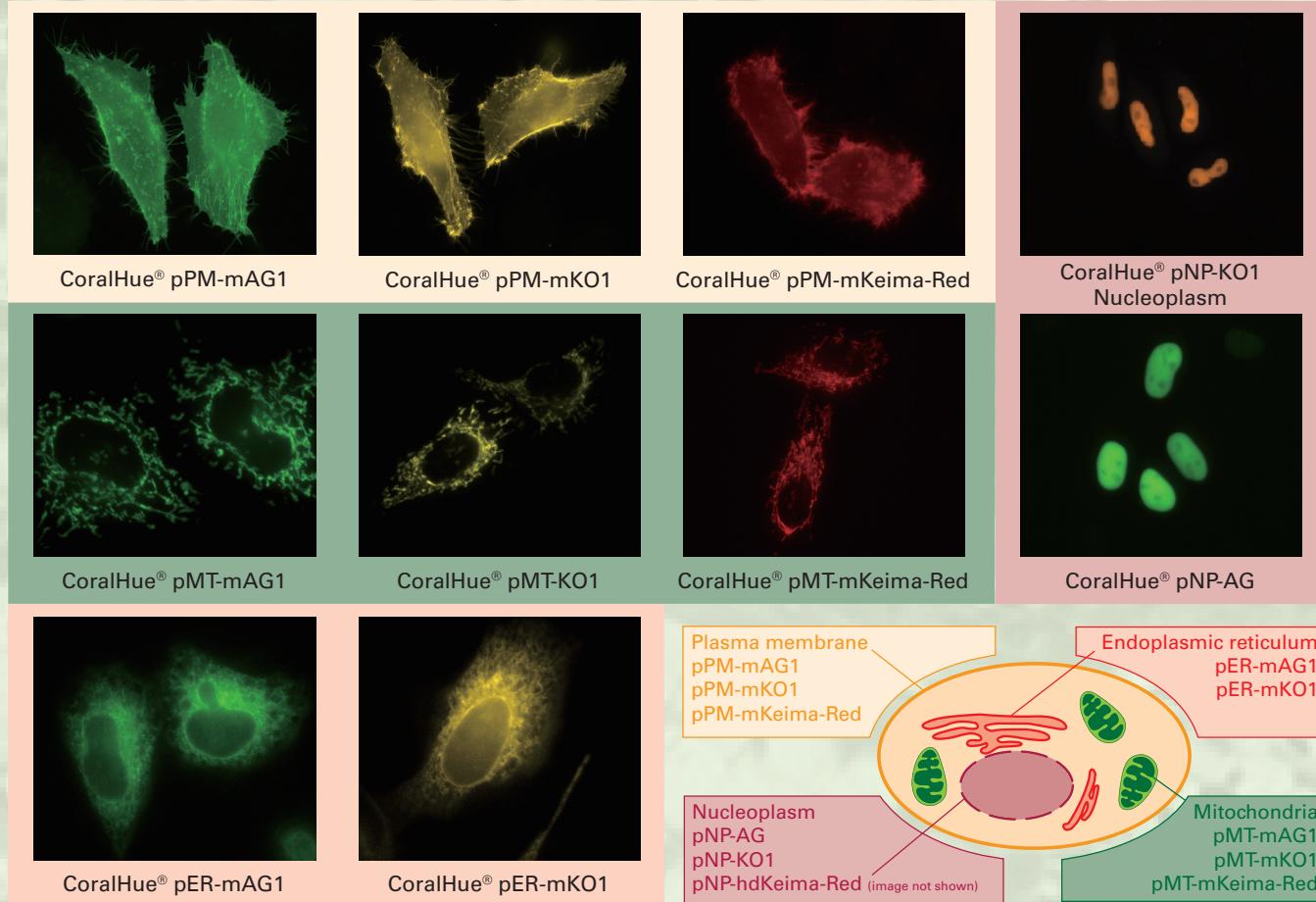
BASIC FLUORESCENT PROTEINS

Product Name	Color	Ex./Em. Maximum (nm)	Oligomerization	Brightness*
MiCy1: Midoriishi-Cyan1	Cyan	472/495	Dimer	24.5
mMiCy1: monomeric Midoriishi-Cyan1	Cyan	470/496	Monomer	15.5
mUkG1: monomeric Umikinoko-Green1	Green	483/499	Monomer	43.2
AG: Azami-Green	Green	492/505	Tetramer	48.4
mAG1: monomeric Azami-Green1	Green	492/505	Monomer	40.7
KO1: Kusabira-Orange1	Orange	548/561	Dimer	33.2
mKO1: monomeric Kusabira-Orange1	Orange	548/559	Monomer	31
mKO2: monomeric Kusabira-Orange2	Orange	551/565	Monomer	39.6
dKeima570	Orange	440/570	Dimer	2.1
dKeima-Red	Red	440/616	Dimer	7.6
mKeima-Red: monomeric Keima-Red	Red	440/620	Monomer	3.5

*Brightness: Molar Extinction Coefficient x Fluorescence Quantum Yield / 1000



ORGANELLE TARGETING VECTORS

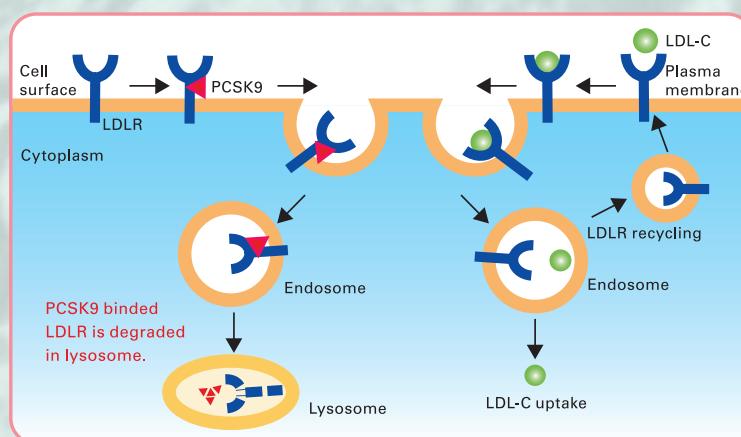


METABOLISM

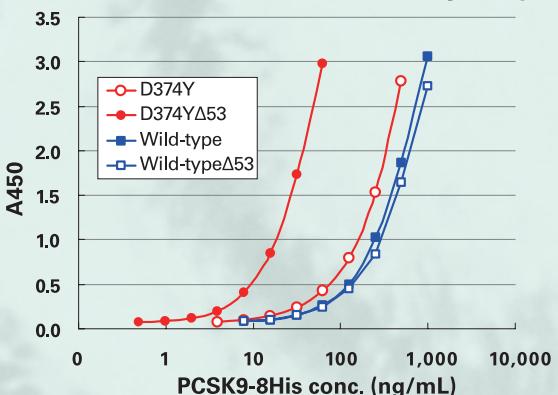
PCSK9 is an extracellular protein expressed primarily in the kidneys, liver and intestines representing the 9th member of the secretory subtilase family. PCSK9 plays a major role in cholesterol metabolism through posttranslational down-regulation of LDLR, the receptor responsible for clearing LDL-C from plasma. PCSK9 binds directly to first epidermal growth factor-like repeat A (EGF-A) domain of LDLR and is required for LDLR degradation. PCSK9 would seem to be an attractive drug target for lowering LDL-C.

References:

Seidah NG, et al. (2003) Proc Natl Acad Sci USA 100:928–933.; Abifadel M, et al. (2003) Nat Genet 34:154–156.; Leren TP (2004) Clin Genet 65:419–422.; Al-lard D, et al. (2005) Hum Mutat 26:497; Cohen JC, et al. (2006) N Engl J Med 354, 1264–1272.; Berge KE, Ose L, Leren TP (2006) Arterioscler Thromb Vasc Biol 26:1094–1100.; Maxwell KN, Breslow JL (2004) Proc Natl Acad Sci USA 101:7100–7105.; Rashid S, et al. (2005) Proc Natl Acad Sci USA 102:5374–5379.; Lagace, T. A., et al. (2006) J. Clin. Investig. 116, 2995–3005.; Cameron, J., et al. (2006) Hum. Mol. Genet. 15, 1551–1558.; Zhang, D. W., et al. (2007) J. Biol. Chem. 282, 18602–18612



■ PCSK-LDLR EGF-AB *in vitro* Binding Assay



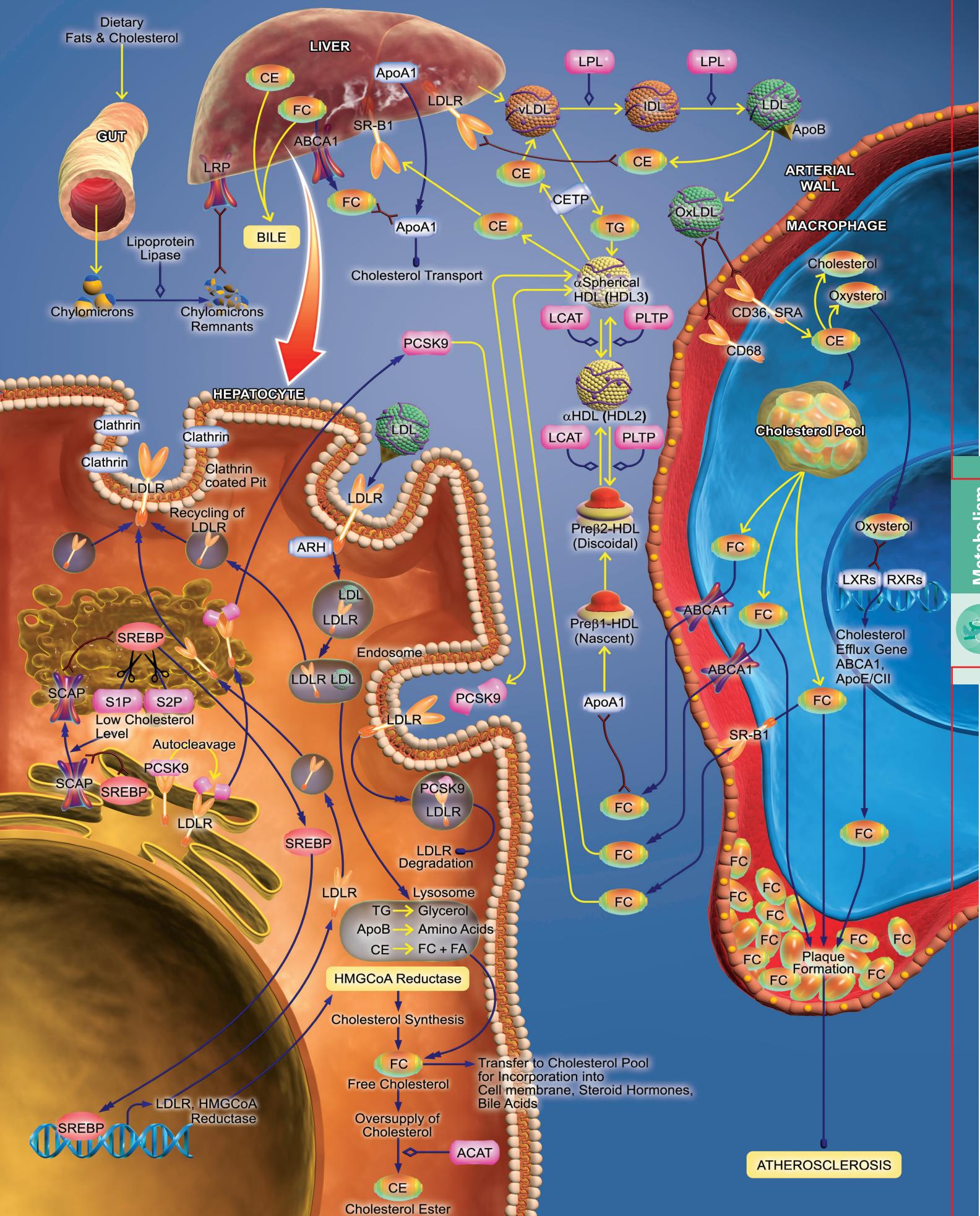
Chitotriosidase is selectively expressed in activated tissue macrophages that accumulates in various tissues of several lysosomal diseases. Elevated levels of serum chitotriosidase are found in disorders caused by the abnormal activation of the immune system, including sarcoidosis and atherosclerosis. Currently it is the only biomarker identified for monitoring the efficacy of the extremely costly enzyme-replacement therapy of Gaucher patients and male Fabry patients. It has been shown that chitotriosidase activity was elevated up to 55-fold in extracts of atherosclerotic tissue, showing a clear connection between chitotriosidase expression and lipid-laden macrophages inside human atherosclerotic vessel wall.

References:

Hollak, C. E., et al. (1994).. J. Clin. Invest. 93: 1288.; Aerts, J. M., and Hollak, C. E. (1997) 10: 691.; Vedder, A.C., et al. (2006) Mol. Genet. Metab. 89: 239.; Grosso, S., et al. (2004) Scand. J. Clin. Lab. Invest.. 64: 57.; Boot, R.G., et al. (1999) Arterioscler.Thromb. Vasc. Biol. 19: 687. Artieda, M., et al. (2003) Arterio-scler. Thromb. Vasc. Biol. 23: 1645.; Labadaridis, J et al. (1998) Acta Paediatr. 87: 605.; Labadaridis, I., et al. (2005) Arch. Dis. Child Fetal Neonatal Ed. 90: F531.

Code No.	Product Name	Size
CY-8079	Human PCSK9 ELISA Kit	96 well
CY-8150	PCSK9-LDLR	96 well
CY-8050	Human Adiponectin ELISA Kit	96 well
CY-8074	Human Chitotriosidase ELISA Kit	96 well
CY-1249	Chitotriosidase Fluorometric Assay Kit	100 assay

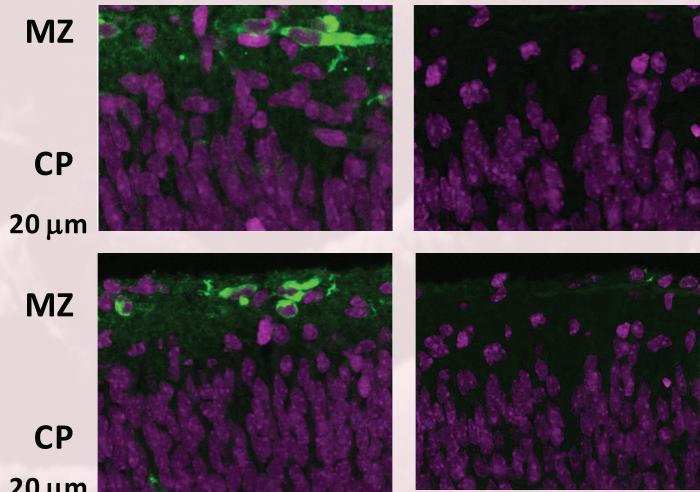
Cholesterol-Cardiovascular Pathway



Antigen Target	Application					
	WB	ELISA	IHC	ICC	IP	FCM
Amphiphysin-1	✓		✓	✓	✓	
Amyloid β	✓	✓	✓			
ApoA1	✓					
ApoA5	✓	✓				
ApoE	✓		✓		✓	
ApoE2	✓					
ApoE3	✓					
ApoE4	✓		✓		✓	
ApoER2	✓		✓	✓	✓	
Amyloid Precursor Protein	✓		✓			
CAF-1	✓		✓	✓	✓	
DJ-1/PARK7	✓	✓				
Drebrin	✓		✓	✓	✓	
Dynamin	✓				✓	
GFAP	✓		✓	✓		
GFR α 1	✓				✓	✓
GPR83	✓		✓			
HES1/KNP-1	✓				✓	
5-HTR2C	✓		✓			
M6a	✓					✓
Nectin-3 (CD113)	✓			✓	✓	✓
Nestin	✓		✓			✓
NET1			✓			
Neuropsin	✓		✓	✓	✓	✓
Nucleolin	✓		✓	✓		
p75NTR						✓
Pax6	✓		✓			
PML	✓			✓	✓	
Reelin/CR-50			✓			
Sema4a					✓	✓
Sema4D						✓
Sema6D	✓				✓	✓
Synaptosomal protein	✓				✓	
Synaptophysin	✓		✓			
Synaptotagmin 1	✓					
Synaptotagmin 2	✓				✓	
Syntaxin-1	✓		✓		✓	
Syntaxin-6	✓				✓	
Syntaxin-7			✓			
TrkB	✓		✓		✓	

Neuroscience is the study of the biological process pertaining to the nervous system. MBL offers over 7,000 antibodies, proteins and kits, many of which are related to neuroscience. Popular targets such as ApoE4 and the S100 proteins are commonly used for Alzheimer's, cystic fibrosis and other neurological disease research.

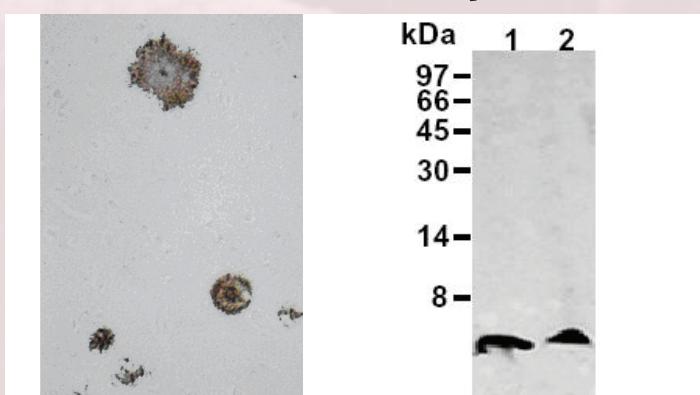
Anti-Reelin /CR-50 mAb



Immunohistochemical detection of Reelin on frozen sections of mouse fetal brain (E18) with D223-3 (left) or isotropic control IgG (right). This data was kindly provided by Professor Kazunori Nakajima and Dr. Ken-ichiro Kubo (Department of Anatomy, Keio University School of Medicine, Tokyo).

(Code No. D223-3)

Anti-Amyloid β mAb

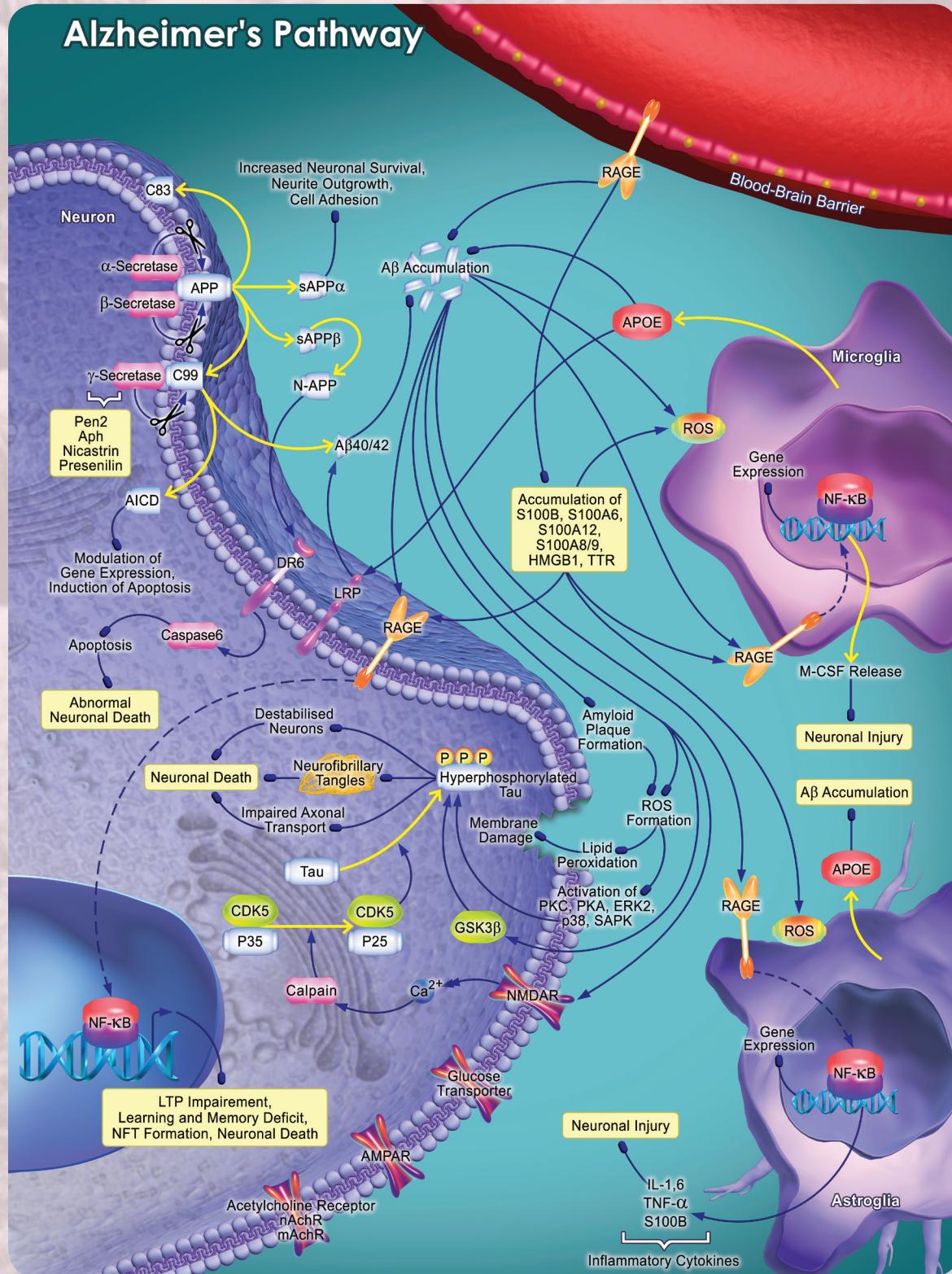


Paraffin section of Alzheimer's disease brain stained with M046-3

Western blot analysis of A β 1-40 (1) and A β 1-42 (2) using M046-3

(Code No. M046-3)

S100 proteins are a family of calcium binding proteins, where each member has specific structure and function. S100 proteins have been observed to play a role in various diseases, making these proteins an important marker for disease diagnosis including possible therapeutic targets.



Code No.
7635
CY-9050
CY-8058

Product Name
ApoE4/Pan-ApoE ELISA Kit
DJ-1/PARK7 ELISA Kit
S100A12/EN-RAGE ELISA Kit

Size
96 well
96 well
96 well



INFECTIOUS DISEASE

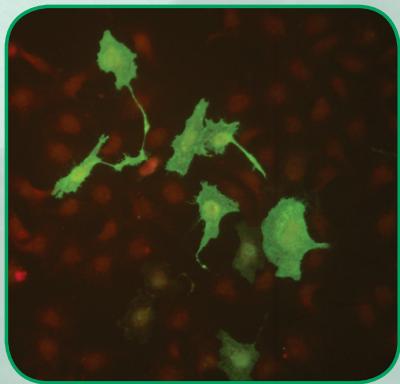
INFECTIOUS DISEASE IFA PRODUCTS

MBLI offers a range of indirect fluorescent antibody assays for the qualitative and/or semi-quantitative determination of specific infectious disease antibodies in human serum. They are intended for use as an aid in the diagnosis of primary infection, reinfection or reactivation of the latent virus as well as a determination of immunological experience and/or immune status.

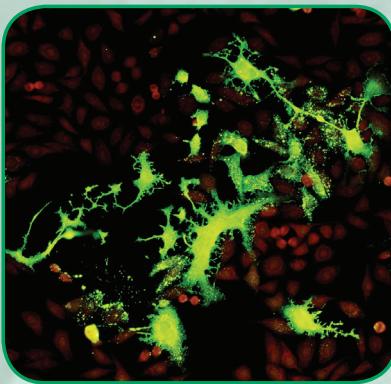
- Substrate slides can be used for the detection of IgG or IgM antibodies
- Each lot of substrate slides is tested with a panel of titered sera to ensure lot to lot sensitivity
- Viral antigen substrate slides contain both positive and negative cells in each well to provide built-in quality control
- Antigen control slides function as quality control substrates for staining reagents used in direct antigen detection and culture confirmation methodologies

Code No.	Product Name	Format	Size
QAD-3012	Adenovirus	Control Slide	2 well
CH-4112	Chlamydia (LGV-1)	Substrate Slide	12 well
CMG-120	Cytomegalovirus, IgG	Test System	120 test
QCM-2002	Cytomegalovirus	Control Slide	2 well
EB-5012	Epstein-Barr Virus, VCA	Substrate Slide	12 well
EBG-120	Epstein-Barr Virus, VCA, IgG	Test System	120 test
EBM-120	Epstein-Barr Virus, VCA, IgM	Test System	120 test
HS2-4012	Herpes Simplex II	Substrate Slide	12 well
HS1-3012	Herpes Simplex I	Substrate Slide	12 well
QHS-3504	Herpes Simplex I and II	Control Slide	4 well
HS1G-120	Herpes Simplex I, IgG	Test System	120 test
HS2G-120	Herpes Simplex II, IgG	Test System	120 test
QAB-1504	Influenza A and B Virus	Control Slide	4 well
ME-6012	Measles (Rubeola) Virus	Substrate Slide	12 well
MEG-120	Measles (Rubeola) Virus, IgG	Test System	120 test
MEM-120	Measles (Rubeola) Virus, IgM	Test System	120 test
MU-8012	Mumps Virus	Substrate Slide	12 well
MUG-120	Mumps Virus, IgG	Test System	120 test
QRP-6314	Respiratory Panel	Control Slide	14 well
QRS-9002	Respiratory Syncytial Virus	Control Slide	2 well
VZ-7012	Varicella Zoster Virus	Substrate Slide	12 well
QVZ-7002	Varicella Zoster Virus	Control Slide	2 well

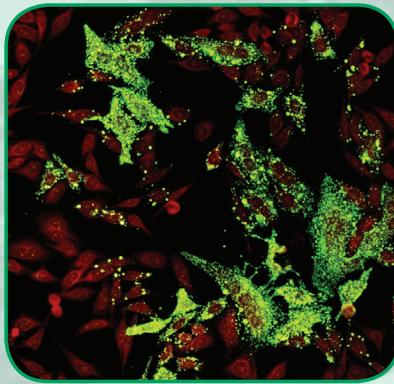
IMMUNOFLUORESCENT STAINING PATTERNS



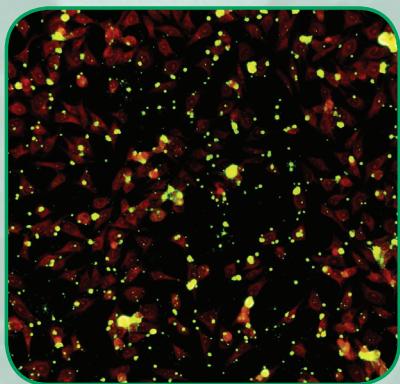
Influenza B



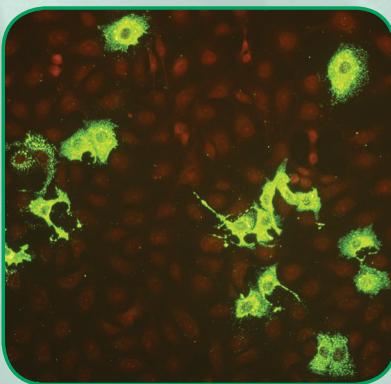
Measles (Rubeola)



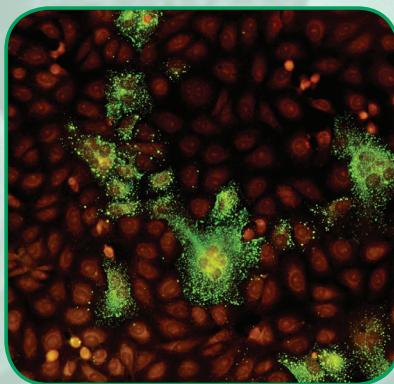
Mumps



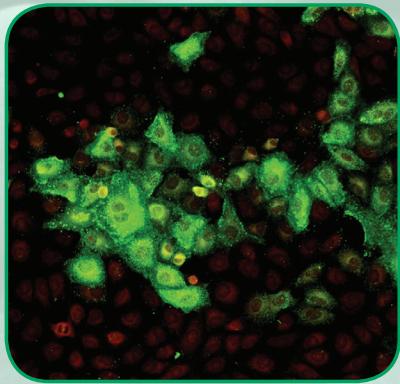
Mycoplasma pneumoniae



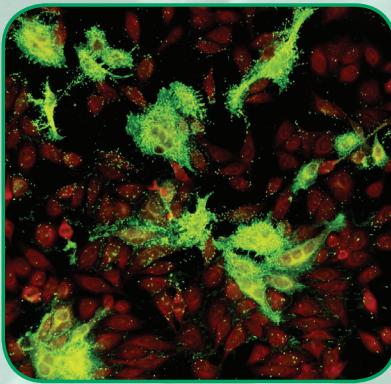
Parainfluenza 1



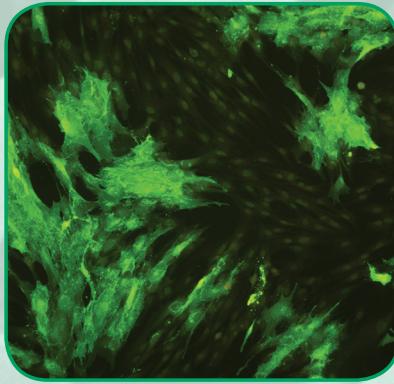
Parainfluenza 2



Parainfluenza 3



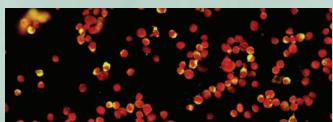
Respiratory Syncytial Virus



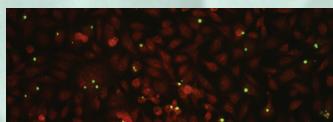
Varicella Zoster

Products for Research Use Only

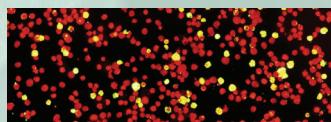
Not for use in Diagnostic Procedures



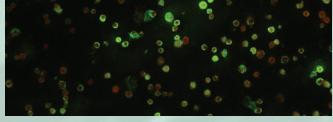
Bartonella henselae



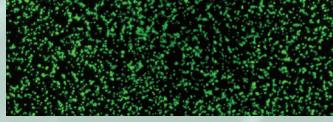
Chlamydia pneumoniae (TWAR)



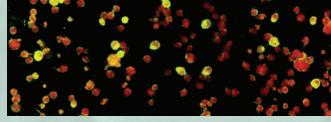
EB Early Antigen, Diffuse



EB Early Antigen,
Restricted & Diffuse



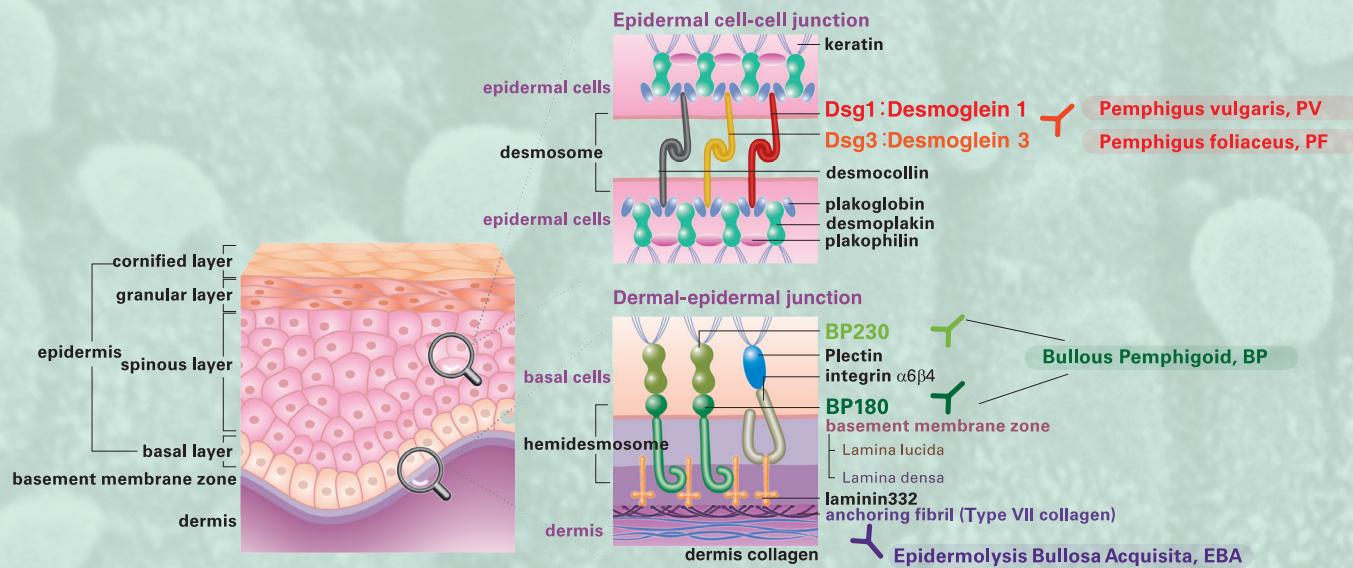
Helicobacter pylori



Human Herpesvirus 6



AUTOIMMUNITY

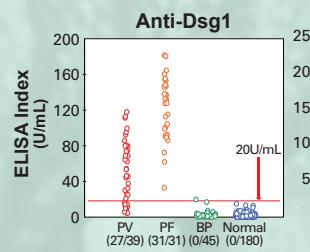


AUTOIMMUNE BLISTERING DISEASE (ABD)

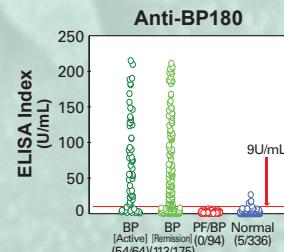
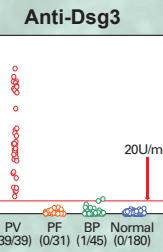
Autoimmune Blistering Diseases (ABDs) are a group of disorders associated with autoantibodies that are directed against desmosomal structural proteins (Pemphigus) or hemidesmosomal proteins (Bullous Pemphigoid and Epidermolysis Bullosa Acquisita). MBL International offers ELISA kits for detection and monitoring of ABDs.

- Highly Specific
- Parallel fluctuation with disease activity
- High Sensitivity
- Economical breakaway strips

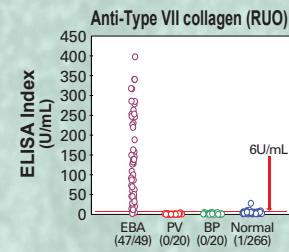
Differential diagnosis of ABDs



Data kindly provided by Dr. Amagai
(Keio University School of Medicine)



Data kindly provided by Dr. Hashimoto
(Kurume University School of Medicine)



Data kindly provided by
Dr. Amagai (Keio University
School of Medicine)

Code No.

- RG-7845R2
RG-M7593-D*
RG-7880EC-D
RG-7885EC-D
RG-M7612-D*
RG-M7613-D*

Product Name

- Anti-TypeVII collagen ELISA Kit
Dsg1 & Dsg3 ELISA Test System
MESACUP®-2 Desmoglein Test "Dsg1" (CE)
MESACUP®-2 Desmoglein Test "Dsg3" (CE)
MESACUP® BP180 ELISA Kit
MESACUP® BP230 ELISA Kit

Size

- 48 well
48 well
48 well
48 well
48 well
48 well

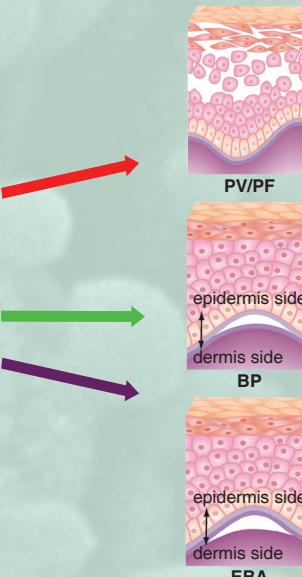
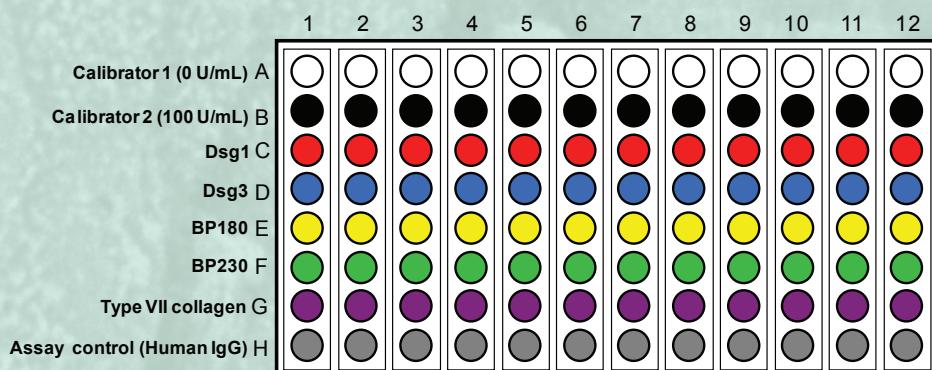
* Products listed are intended for use in diagnostic procedures

MESCUP® is a registered trademark of Medical & Biological Laboratories, Co., Ltd.

ANTI-SKIN PROFILE ELISA KIT

1 Assay for 5 Autoantibodies

- Single assay detects five anti-skin specific antibodies
- Qualitative detection of anti-Dsg1, anti-Dsg3, anti-BP180, anti-BP230 and anti-TypeVII collagen in human serum
- Only commercial anti-skin panel ELISA Kit for diagnosis and monitoring of ABDs



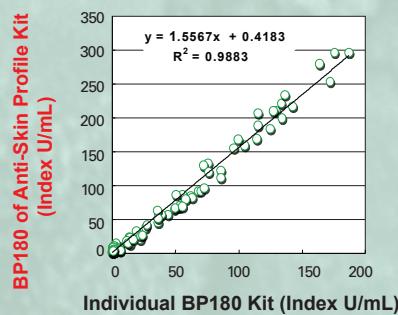
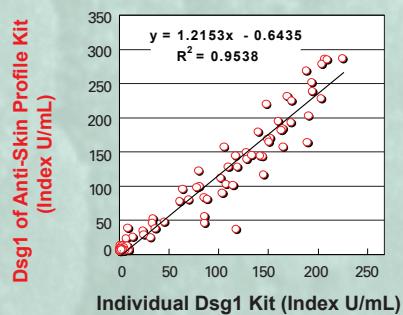
Comparison of existing MBLI's ELISA Kits and Anti-Skin Profile ELISA Kit

Consistency rates

Data was obtained from serum samples from 30 PV patients, 30 PF patients, 30 BP patients in active stage, 30 BP patients in remission, 30 EBA patients, and 42 normal controls.

	Concordance	Disconcordance	Concordance Rate
Dsg1	189	3	98.4%
Dsg3	191	1	99.5%
BP180	191	1	99.5%
BP230	189	3	98.4%
Type VII collagen	189	3	98.4%

Data kindly provided by Dr. Hashimoto (Kurume University School of Medicine)



Code No.
RG-7115R

Product Name
Anti-Skin Profile ELISA Kit

Size
12 x 8 well

ANTI-ARS

Aminoacyl tRNA Synthetase (ARS)

- The only commercial ELISA kit to detect anti-ARS antibodies in human serum
- Single well measures anti-Jo-1 anti-PL-7, anti-PL-12, anti-EJ and anti-KS
- Aids in detection of polymyositis (PM), dermatomyositis (DM), anti-synthetase syndrome and interstitial lung disease (ILD)

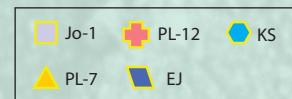
Common Myositis-Specific Antibodies and Frequency

Nakashima R, Mimori T. Clinical and pathophysiological significance of myositis-associated autoantibodies. Int. J. Clin. Rheumatol. 5: 523-536; 2010. Review.

Anti-Jo-1	15-20%
Anti-PL-7	5-10%
Anti-EJ	5-10%
Anti-PL-12	<5%
Anti-KS	<5%

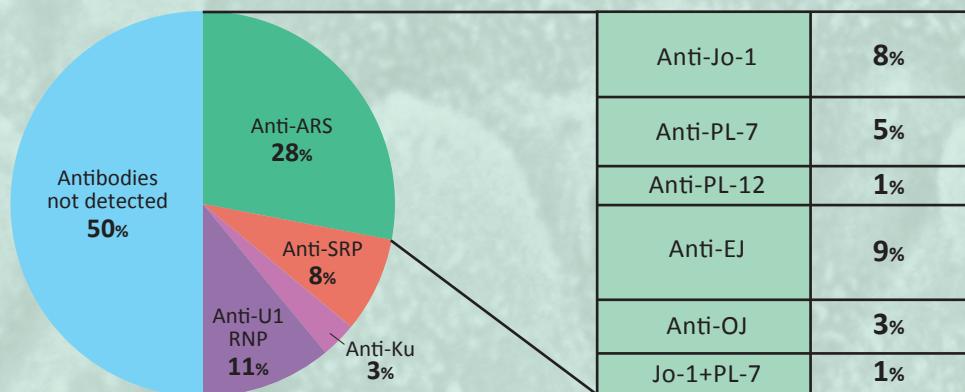
Cocktail antigen assay

Increase detection rate to ARS antibodies



Frequency of Autoimmune Antibodies in PM/DM (n=74)

Yoshifuji H, Fujii T, Kobayashi S, et al. Anti-aminoacyl-tRNA synthetase antibodies in clinical course prediction of interstitial lung disease complicated with idiopathic inflammatory myopathies. Autoimmunity 39: 133-241; 2006.



Presence of Anti-ARS antibodies predict the development of ILD

Anti-ARS autoantibodies are found in patients with PM/DM, especially in those associated with ILD. Recent studies also indicate that patients with anti-ARS antibody-positive ILD have pulmonary manifestations regardless of the presence of PM/DM.

Clinical representation	Prevalence (%)
Interstitial lung disease	95
Raynaud's phenomenon	67
Polyarthritis	57
High fever ($\geq 38^{\circ}\text{C}$)	43
Mechanic's hands	33

Brouwer R, Hengstman GJD, Vree Egberts W et al. Autoantibody profiles in the sera of European patients with myositis. Ann.Rheum. Dis. 60: 116-123; 2001.

Code No.

RG-7841R

RG-7841E

Product Name

Anti-Synthetase ELISA Kit (RUO)

Anti-Synthetase ELISA Kit (CE)

Size

48 well

48 well

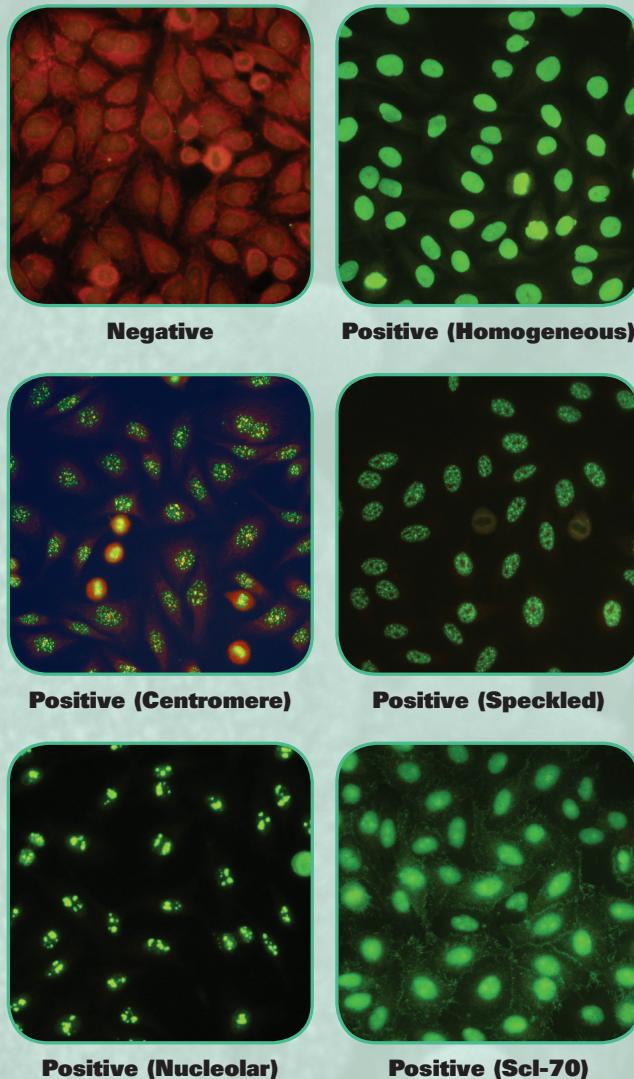
SYSTEMIC DISEASE

Antinuclear Antibodies (ANAs)

ANAs are a group of autoantibodies characterized by specificity for numerous antigenic determinants of cell nuclei.

Considered the "Gold Standard"[‡], the ANA test systems and substrate slides are based on an indirect fluorescent antibody assay. HEp-2 tissue culture cells are utilized as a substrate for the qualitative and/or semi-quantitative determination of antinuclear antibodies in human serum.

- Minimal lot to lot variability by using a panel of titered control sera
- Screens for a wide range of autoantibodies offering insight through pattern recognition
- 24-month expiration date from date of manufacture
- IFA Diluent improves the readability without affecting endpoint titers



[‡] American College of Rheumatology, Position Statement on the Methodology of Testing for Antinuclear Antibodies Diseases.
Available at: http://www.rheumatology.org/practice/clinical/position/ana_position_stmt.pdf

Code No.	Product Name	Application	Size
ANK-120*	ANA (HEp-2) Test System	IFA	120 test
AN-1012*	Antinuclear Antibody (HEp-2) slide	IFA	12 well
RG-7991EC-D*	CENP-B (MESACUP®-2)	ELISA	96 well
RG-7808	DFS70 Antibody Detection Kit	ELISA	96 well
RG-4730E	Fluoro ANCA Test	IFA	60 well
DIL-9993/9994/9995*	IFA Diluent	IFA	60/125/250 mL
RG-7981EC-D*	Jo-1 (MESACUP®-3)	ELISA	96 well
RG-M7836-D*	RNA Polymerase III	ELISA	48 well
RG-7941EC-D*	RNP (MESACUP®-2)	ELISA	96 well
RG-7971EC-D*	Scl-70 (MESACUP®-3)	ELISA	96 well
RG-7931EC-D*	SM (MESACUP®-3)	ELISA	96 well
RG-7951EC-D*	SS-A (MESACUP®-2)	ELISA	96 well
RG-7961EC-D*	SS-B (MESACUP®-3)	ELISA	96 well

* Products listed are intended for use in diagnostic procedures



FEATURED PRODUCTS

Please refer to mblintl.com for a complete listing of our portfolio of Research Use Only and Clinical Diagnostic Products.

ANTIBODIES											
Code No.	Antigen Target	Application	Species Reactivities	Code No.	Antigen Target	Application	Species Reactivities	Code No.	Antigen Target	Application	Species Reactivities
K0203-3	14-3-3 gamma	IPP, WB	Hu, Mo, Rt	K0107-4	CD135/FLT3 (FITC)	FCM	Hu	D218-3	DSG3 (No Azide)	ICC, IHC, IPP	Hu, Mo
MC-655	5-HT4 Receptor	IHC	Hu	D036-5	CD157 (PE)	FCM	Hu	D219-3	DSG3 (No Azide)	ICC, IHC, IPP	Hu, Mo
D147-3	Abi-1	IHC, IPP, WB	Hu, Mo, Ha	D036-3	CD157/BST-1	FCM	Hu	M141-3	EDAR	FCM	Hu
PD040	Acetylated SMC3	WB	Hu, Mo	K0122-1	CD160	FCM, IPP	Hu	MC-211	Edg2/LPA1	IHC	Hu
D244-3	Acetylated-p53 (Lys120)	WB	Hu	K0147-4	CD163 (FITC)	FCM	Hu	MC-1031	Edg3/S1P3	IHC	Hu
MC-7773	ADAMTS4	IHC	Hu	K0044-4	CD166 (FITC)	FCM	Hu	MC-3802	Edg8/S1P5	IHC	Hu
RN028PW	AGO1/EIF2C1	IPP, WB	Hu, Mo	M096-4	CD170/Siglec-5 (FITC)	FCM, IPP	Mo	M022-3	EDN	WB	Hu
RN029PW	AGO2/EIF2C2	WB	Hu, Mo, Rt	M096-3	CD170/Siglec-5	FCM, IPP	Mo	MI-12-1	EGF-R	FCM, ICC, IPP, WB	Hu
RN003M	AGO2/EIF2C2	IPP, RIP, WB	Hu	K0110-3	CD172a/SIRPa	FCM	Hu	RN001P	EIF4E	IPP, RIP, WB	Hu, Mo, Rt, Ha
M046-3	Amyloid beta N-terminal Specific	IHC, WB	Hu, Mo	D080-3	CD180/RP105	FCM, IHC, IPP	Hu	RN002P	EIF4G1	IPP, RIP, WB	Hu
4695-100	Annexin V (Biotin) (Reagent)			D123-4	CD184/CXCR4 (FITC)	FCM	Hu	RN004P	ELAVAL1/HuR	IPP, RIP, WB	Hu, Mo, Rt, Ha
MC-65	APJ/AGTRL1	ICC, IHC	Hu	D063-3	CD191/CCR1	FCM	Hu	RN005P	ELAVAL2/HuB	IPP, RIP, WB	Hu
EP-5032	ApoA5	WB, ELISA	Hu	D085-3	CD193/CCR3	FCM, ICC	Hu	RN006P	ELAVAL3/HuC	IPP, RIP, WB	Hu, Mo, Rt
M068-3	ApoE	IHC, IPP, WB	Hu	D085-4	CD193/CCR3 (FITC)	FCM, ICC	Hu	MC-2678	EMR1	IHC	Hu
M067-3	ApoE4	IHC, IPP, WB	Hu	D074-3	CD197/CCR7	FCM	Hu	MC-4069	Endothelin A Receptor	IHC	Hu
D086-3	ASC/TMS1	ICC, IHC, IPP, WB	Hu	D200-4	CD257 (FITC)	FCM	Hu	D269-3	EpCAM/CD326	FCM	Mo
MS-20-3	Ash/Grb2	IF, WB	Hu, Mo, Rt	D230-3	CD274/PD-L1	FCM, IHC	Hu	MC-2621	F2R	IHC	Hu
PD011	ATBF1 (AT-6)	IPP, WB	Hu, Mo, Rt	D230-5	CD274/PD-L1 (PE)	FCM	Hu	MC-252	F2RL1/PAR2	IHC	Hu
PD010	ATBF1 (D1-120)	ICC, IF, IPP, WB	Hu, Mo, Rt	D132-3	CD279/PD-1	FCM, WB	Hu	M033-3	FADD	WB	Hu, Mo
M154-3	Atg12	ICC, IPP, WB	Hu	D133-3	CD279/PD-1	FCM	Hu	SY-001	Fas/CD95	FCM, WB	Hu
M183-3	Atg13	IPP, WB	Hu, Mo, Rt, Ha	D276-A48	CD36/GPIV (Alexa Fluor 488)	FCM	Hu	MD-11-3	Fas/CD95	FCM, NT, WB	Hu
PD026	Atg14	IPP, WB	Hu, Mo, Rt	D056-3	CD43	FCM, ICC, IHC, WB	Hu	MD-10-A48	Fas/CD95 (Alexa Fluor 488)	FCM	Hu
M150-3	Atg16L	WB	Hu, Mo, Rt	D204-3	CD52/CAMPATH-1	FCM, IPP	Mo	K0055-3	FHL2	IHC, IPP, WB	Hu, Mo
PM040	Atg16L	ICC, IPP, WB	Hu, Mo, Rt, Ha	D204-4	CD52/CAMPATH-1 (FITC)	FCM	Mo	D162-3	Flavocytochrome b558	FCM	Hu
M133-3	Atg3	ICC, IPP, WB	Hu, Mo, Rt, Ha	D204-5	CD52/CAMPATH-1 (PE)	FCM	Mo	D162-4	Flavocytochrome b558 (FITC)	FCM	Hu
M153-3	Atg5	WB	Hu, Mo, Ha	M109-3	CD61	FCM, IPP, WB	Mo	D162-5	Flavocytochrome b558 (PE)	FCM	Hu
PM050	Atg5	WB	Hu, Mo, Rt	D280-A48	CD62P (Alexa Fluor 488)	FCM	Hu	RN016P	FMR1	IPP, RIP, WB	Hu, Mo, Rt
8485	Autophagy Ab Sampler Set			D263-3	CD63/LAMP-3	FCM, WB	Mo	MC-2231	FSHR	IHC	Hu
MC-3831	AVPR1A/V1a	IHC	Hu	MC-8811	CD70	IHC	Hu	MC-4911	FZD4	IHC	Hu
MC-272	AVPR2/V2R	IHC	Hu	K0140-3	Cdc20	ICC, IPP, WB	Hu	MC-4482	FZD6	ICC, IHC	Hu
MC-273	AVPR2/V2R	IHC	Hu	K0070-3	CDC7	IHC, IPP, WB	Hu	M135-3	GABARAP	WB	Hu, Mo, Rt, Ha
MC-3580	B1R/BDKRB1	IHC	Hu	K0085-3	Cdh1/Fzr	IPP, WB	Hu, Mo, Rt	PM037	GABARAP	ICC, WB	Hu, Mo, Rt, Ha
MC-799	B1R/BDKRB1	IHC	Hu	MC-5367	CELSR1	IHC	Hu	M057-3	GAK	WB	Hu, Mo, Rt
PD017	Beclin 1	ICC, IPP, WB	Hu, Mo, Rt, Ha	D115-3	CENP-A	ICC, IHC, WB	Hu	M171-3	GAPDH	WB	Hu, Mo, Rt, Ha, Ch
MC-2656	Beta-2 Adrenoceptor	ICC, IHC, WB	Hu	PD030	CENP-C	ICC, IPP, WB	Hu	M171-7	GAPDH (HRP-DirecT)	WB	Hu, Mo, Rt, Ha, Ch
MC-4198	Beta-3 Adrenoceptor	IHC	Hu	D286-3	CENP-T/ICEN22	ICC, IPP, WB	Hu	PM038	GATE-16	WB	Hu, Mo, Rt, Ha, Ch
M177-3	β-Actin	IPP, WB	Hu, Mo, Rt, Ha, Ch	K0086-3	Chk1	IHC, IPP, WB	Hu, Mo, Rt	598	GFP	ICC, IHC, IPP, ChIP, WB	
M094-3	β-galactosidase	ICC, IHC, IPP, WB		MC-220	CHRM4	IHC	Hu	D153-3	GFP	ICC, IPP	
PM049	β-galactosidase	ICC, IHC, IPP, WB		MC-1778	CRHR1	IHC	Hu	M048-3	GFP	ICC, IHC, IPP, WB	
PD021	β5t	ICC, IHC, IPP, WB	Mo	D070-3	CX3CR1	FCM	Hu	D153-8	GFP (Agarose)	IPP	
M072-3	BID	WB	Hu	D070-A48	CX3CR1 (Alexa Fluor 488)	FCM	Hu	D153-A48	GFP (Alexa Fluor 488)	ICC	
EP-3080	BMPR-1A	WB, IPP	Hu, Mo	D070-4	CX3CR1 (FITC)	FCM	Hu	598-7	GFP (HRP-DirecT)	WB	
M147-3	Borealin	ICC, IPP, WB	Hu	D070-5	CX3CR1 (PE)	FCM	Hu	D153-9	GFP (Magnetic beads)	IPP	
MI-11-3	Bromodeoxyuridine (BrdU)	FCM, ICC, IHC		MC-806	CXCR1	ICC, IHC	Hu	M142-3	GFRalpha1	WB	Hu
M059-3	Caspase-10	WB	Hu	MC-1374	CXCR3	IHC	Hu	M143-3	GFRalpha1	FCM, IPP	Hu
K0197-3	Caspase-3	IPP	Hu	MC-1376	CXCR4	IHC	Hu	MC-834	GHRHR	IHC	Hu
M029-3	Caspase-4	WB	Hu	MC-1380	CXCR4	IHC	Hu	MC-6576	GHSR	IHC	Hu
M060-3	Caspase-5	WB	Hu	MC-1384	CXCR5	IHC	Hu	MC-1250	GIPR	IHC	Hu
M032-3	Caspase-8	WB	Hu	MC-1385	CXCR5	IHC	Hu	MC-1209	GLP1R	IHC	Hu
M058-3	Caspase-8	IPP, WB	Hu	K0223-3	CXCR7/RDC1	FCM, ICC, IHC, NT	Hu	MC-1312	GLP2R	ICC, IHC, WB	Hu
M054-3	Caspase-9	WB	Hu, Mo, Rt	K0189-3	Cyclin B2 (Xenopus)	WB	Xenopus	M018-3	Glutamic Acid Decarboxylase (GAD)	IHC, WB	Mo, Rt
MC-1427	CASR	IHC	Hu	MD-17-3	Cyclin D1	FCM, IHC, IPP, WB	Hu, Mo	M015-3	Glutathione Peroxidase	ICC, WB	Hu
MC-31	CB1	ICC, IHC	Hu	M185-9	DDDDK (Magnetic beads)	IPP		551	Go α (GTP binding protein alpha subunit)	WB, IHC, IPP	Hu, Rt
MC-847	CCR7	IHC	Hu	PM018	Derlin-1	ICC, IPP, WB	Hu, Mo	D277-3	GP2	FCM, ICC, IHC	Hu
MC-958	CCR9	IHC	Hu	PM019	Derlin-2	WB	Hu, Mo	D278-3	GP2	FCM, ICC, IHC	Mo
MC-961	CCR9	IHC	Hu	M037-3	DFF45	WB	Hu	D277-A48	GP2 (Alexa Fluor 488)	FCM	Hu
D142-3	CD100/Sema4D	FCM	Mo	MC-1854	D-GPCR	IHC	Hu	D278-5	GP2 (PE)	FCM	Mo
566	CD117/c-Kit	WB, ICC, IHC	Hu	D187-3	Dlk/Pref-1	FCM, IHC	Mo	D087-5	GPI-80 (PE)	FCM	Hu
M100-3	CD11c	FCM, IPP	Mo	D187-4	Dlk/Pref-1 (FITC)	FCM	Mo	MC-6577	GPR105/P2Y14	IHC	Hu
K0039-3	CD120a/TNF-R1	FCM	Hu	D187-5	Dlk/Pref-1 (PE)	FCM	Mo	MC-2003	GPR120	IHC	Hu
K0040-3	CD120b/TNF-R2	FCM, IPP	Hu	MC-44	DRD1	IHC	Hu	MC-2004	GPR120	IHC	Hu
K0056-5	CD123 (PE)	FCM	Hu	D029-3	Drebrin	ICC, IHC, IPP, WB	Hu, Mo, Rt, Rb, Bo, Ch, Ct	MC-2006	GPR120	IHC	Hu

FEATURED PRODUCTS

ANTIBODIES											
Code No.	Antigen Target	Application	Species Reactivities	Code No.	Antigen Target	Application	Species Reactivities	Code No.	Antigen Target	Application	Species Reactivities
MC-3201	GPR154	IHC	Hu	D326-3	IL-17RB	FCM	Mo	D146-3	Nectin-1	ICC	Mo
MC-46	GPR183/EBI2	IHC	Hu	D043-3	IL-18	IHC, WB	Hu	D164-3	NEU3	IHC, IPP, WB	Hu
MC-1184	GPR30	FCM, IF, IHC	Hu	D044-3	IL-18	ELISA, IPP, NT	Hu	M169-A48	Neuropilin-1/CD304 (Alexa Fluor 488)	FCM	Mo
MC-4268	GPR30	IF	Hu	D045-3	IL-18	IPP	Hu	M169-A64	Neuropilin-1/CD304 (Alexa Fluor 647)	FCM	Mo
MC-4271	GPR30	IF, IHC	Hu	D046-3	IL-18	WB	Mo	D289-3	Np95	FCM, ICC, IHC, IPP, WB	Mo
MC-2	GPR35	ICC, IHC	Hu	D047-3	IL-18	IPP	Mo	MC-5188	NR1F3	IHC	Hu
MC-6599	GPR43	IHC	Hu	D048-3	IL-18	IPP, NT	Mo	MC-5402	NR3B1	IHC	Hu
MC-3529	GPR44	IHC	Hu	PM014	IL-18	IHC, WB	Hu	MC-2341	NR4A3	IHC	Hu
MC-3530	GPR44/CRTH2	ICC, IHC	Hu	D045-6	IL-18 (Biotin)	ELISA	Hu	MC-5377	NR5A1/SF1/SF-1	IHC	Hu
MC-1236	GPR49	IHC	Hu	D048-6	IL-18 (Biotin)	ELISA	Mo	PD002-H	NSE	IHC	Hu, Mo, Rt
MC-1926	GPR54	IHC	Hu	M161-3	IL-33	IPP, WB	Mo	M019-3	Nucleolin	FCM, ICC, IHC, WB	Hu
MC-162	GPR55	IHC	Hu	M187-3	IL-33	WB	Mo	M146-3	Nuf2	IPP, WB	Hu
MC-6817	GPR55	IHC	Hu	PM033	IL-33	IHC, WB	Hu	MC-222	OPRD1	IHC	Hu
MC-4954	GPR72/GPR83	IHC	Hu	D169-3	Importin alpha3/Qip1 WB		Hu, Mo, Rt, Ha	MC-230	OPRK1	IHC	Hu
MC-1580	GPR87/GPR95	IHC	Hu	K0046-3	Integrin alpha7	FCM, ICC	Mo	M055-3	ORC2	ICC, IPP, WB	Hu
MC-568	GPRC5D	IHC	Hu	K0047-3	Integrin alpha7	FCM	Mo	MC-244	Oxytocin Receptor	IHC	Hu
MC-571	GPRC5D	IHC	Hu	K0046-4	Integrin alpha7 (FITC)	FCM	Mo	MC-3786	P2RY1	IHC	Hu
MC-2576	GPRC6A	IHC	Hu	K0046-5	Integrin alpha7 (PE)	FCM	Mo	MC-5021	P2RY4/P2Y4	IHC	Hu
D186-3	Granulysin	FCM, ICC, IPP, WB	Hu	K0100-3	IQGAP1	IPP, WB	Hu, Mo, Rt	MC-3742	P2Y12	ICC, IHC	Hu
MC-892	GRM2/MGLUR2	ICC, IHC, WB	Hu	M182-3	Keima-Red	WB		PD009	p54	ICC, IHC, WB	Hu, Mo, Rt
MC-830	GRPR	ICC, IHC, WB	Hu	PM057	KLF4	ICC, IPP, WB	Hu, Mo	PM066	p62 C-terminal	ICC, IHC, IPP, WB	Hu, Mo, Rt, Ha
MC-831	GRPR	ICC, IHC	Hu	M152-3	LC3	FCM, ICC, IPP, WB	Hu, Mo, Rt, Ha	M162-3	p62/SQSTM1	FCM, ICC, IHC, IPP, WB	Hu
311	GST-P	IHC, WB	Hu, Rt	M186-3	LC3	WB	Hu, Mo, Rt, Ha	PM045	p62/SQSTM1	ICC, IHC, IPP, WB	Hu, Mo, Rt, Ha
312	GST-rr	WB, IHC	Hu	PM036	LC3	FCM, ICC, IHC, IPP, WB	Hu, Mo, Rt, Ha	M162-A4	p62/SQSTM1 (Alexa Fluor 647)	FCM, ICC	Hu
RN033P	GW182/TNRC6A	IPP, RIP, WB	Hu	M115-3	LC3	WB	Hu, Mo, Rt	M162-A48	p62/SQSTM1 (Alexa Fluor 488)	FCM, ICC	Hu
561-8	HA (Agarose)	IPP		PD014	LC3	WB	Hu, Mo, Rt, Ha	PD022	Pax6	IHC, WB	Mo, Rt, Ch
M180-A64	HA (Alexa Fluor 647)	FCM, ICC		PD015	LC3	ICC	Mo, Rt	RN024P	PCBP1	IPP, RIP, WB	Hu, Mo, Rt
561-A48	HA (Alexa Fluor 488)	FCM, ICC		PM046	LC3	ICC, WB	Hu, Mo, Rt, Ha	RN054PW	PCBP3	IPP, WB	Hu, Mo, Rt, Ha
561-7	HA (HRP-DirecT)	WB		PM036-PN	LC3 positive control	WB		M084-4	PCLP1 (FITC)	FCM	Hu
M132-9	HA (Magnetic beads)	IPP		D192-3	LGALS9	ELISA, FCM	Hu	D072-5	PCLP1 (PE)	FCM	Mo
M180-9	HA (Magnetic beads)	IPP		MC-566	LGR7	IHC	Hu	CY-M1032	PCSK9	IPP, WB	Hu
RN051PW	HDLBP/Vigilin	IPP, WB	Hu, Mo	MC-1436	LHCGR	IHC	Hu	CY-M1033	PCSK9	IPP, WB	Hu
D134-3	HES1	ICC, IHC, IPP, WB	Mo, Rt	D118-3	Liv2	FCM, IHC	Mo	CY-P1037	PCSK9	IPP, WB	Hu
M089-3	His	WB		PM016	Luciferase	ICC, IHC, IPP, WB		D190-3	PDPN/AGGRUS	FCM, IHC, IPP, WB	Mo
D291-A64	His (Alexa Fluor 647)	FCM, ICC		D160-3	Ly49Q	FCM	Mo	K0090-3	Pds-1	ICC, IHC, IPP, WB	Hu, Mo, Rt
D291-A48	His (Alexa Fluor 488)	FCM, ICC		D160-4	Ly49Q (FITC)	FCM	Mo	K0143-3	Pendrin	IHC	Hu
D291-7	His (HRP-DirecT)	WB		D160-5	Ly49Q (PE)	FCM	Mo	CY-M1021	Phospho-Cdc7 (Thr376)	ELISA, IF	Hu
D291-9	His (Magnetic beads)	IPP		D225-3	LYVE-1	FCM, IHC	Mo	CY-M1024	Phospho-CPI-17 (Thr38)	ELISA, WB	Hu, Mo, Rt
D226-3	HLA class I (HLA-A,B,C)	IHC, WB	Hu	D279-3	M cell specific	FCM, IHC, IPP, WB	Mo	CY-M1020	Phospho-Lats2 (Ser83)	ELISA, WB	Hu
K0186-4	HLA-A2 (FITC)	FCM	Hu	D055-3	M6a	FCM, IHC	Mo	CY-M1019	Phospho-LSP1 (Ser204)	ELISA, WB	Hu, Mo, Rt
K0208-3	HLA-A24	FCM	Hu	K0167-3	MAD2	IPP, WB	Hu, Mo, Rt	CY-P1025	Phospho-MBS/MYPT1 (Thr853)	ELISA, WB	Hu, Mo, Rt, Ch
K0209-3	HLA-A24	FCM	Hu	MC-1531	MAS1/MAS	IHC	Hu	CY-M1011	Phospho-MBS (Thr986)	ELISA, WB	Hu, Mo, Rt, Ch
K0208-A64	HLA-A24 (Alexa Fluor 647)	FCM	Hu	D053-5	Mesothelin (PE)	FCM	Mo	CY-M1012	Phospho-Rb (Ser612)	ELISA, IPP, WB	Hu
K0208-4	HLA-A24 (FITC)	FCM	Hu	D161-3	MFG-E8	FCM, IPP	Mo	D076-3	Phosphorylated Vimentin (Ser35)	ELISA, ICC, WB	Hu, Mo, Rt
K0209-4	HLA-A24 (FITC)	FCM	Hu	D199-3	MFG-E8	IHC, WB	Mo	D076-3S	Phosphorylated Vimentin (Ser35)	ICC, WB	Hu, Mo, Rt
K0208-5	HLA-A24 (PE)	FCM	Hu	K0099-3	MIBP	WB	Hu, Mo, Rt	D095-3	Phosphorylated Vimentin (Ser62)	ICC, WB	Hu, Mo, Rt
K0209-5	HLA-A24 (PE)	FCM	Hu	K0217-3	MICA	ELISA, FCM	Hu	D128-3	Phospho-STAT3 (Tyr708)	WB	Hu, Mo, Zebrafish
M137-3	HMGB/HMG1	WB	Hu, Mo, Rt	K0218-3	MICA/B	ELISA, FCM, IPP	Hu	CY-M1023	Phospho-Syntide-2	ELISA	
RN019P	HNRNPK	IPP, RIP, WB	Hu, Mo, Rt	D292-3	Mincle	FCM, IPP, WB	Mo	MD-06-3	PI-3 Kinase (p85a)	ICC, IPP, WB	Hu, Mo, Rt
BMP002	HP1b	ICC, IHC, IPP, WB	Hu, Mo, Rt, Ha	D238-3	MORC3	ICC, WB	Hu, Mo, Rt	D143-3	PIP2	Dot Blot	
M099-3	HRF/TCTP	IHC, WB	Hu, Mo, Rt	D270-3	Msi1	IHC, WB	Hu, Mo, Rt	D145-3	PIP3	Dot Blot	
PM017	HRF/TCTP	IHC, WB	Hu, Mo, Rt	D233-3	MSLN/MPF/SMRP	FCM	Mo	M041-3	PML	FCM, ICC, IPP, WB	Hu
MC-476	HRH3	ICC, IHC	Hu	D058-3	Multi Ubiquitin	WB	Hu	D301-3	P-Rex1	IHC, WB	Hu, Mo
MC-3785	HRH4	ICC	Hu	D071-3	Multi Ubiquitin	WB	Hu	D031-3	Proton Pump (H,K-ATPase alpha subunit)	IHC, IPP, WB	Hu, Mo, Rt, Bo
MC-1111	HTR1B/5-HT2B	IHC	Hu	D058-8	Multi Ubiquitin (Agarose)	IPP	Hu	D032-3	Proton Pump (H,K-ATPase beta subunit)	IHC, IPP, WB	Hu, Mo, Rt, Bo
MTG-001	Human Fc receptor blocking reagent	Blocking buffer	Hu	D058-9	Multi Ubiquitin (Magnetic beads)	IPP	Hu	MC-6332	PSGR	IHC	Hu
D299-3	IDH1-R132H	ICC, IHC, IPP, WB	Hu	562-5	Myc	ICC, IPP, WB		K0142-3	PSMA	FCM	Hu
RN001M	IGF2BP1/IMP1	IPP, RIP, WB	Hu, Mo	M047-3	Myc	ICC, IPP, WB		K0142-4	PSMA (FITC)	FCM	Hu
RN007P	IGF2BP1/IMP1	IPP, RIP, WB	Hu, Mo	M047-8	Myc (Agarose)	IPP		K0142-5	PSMA (PE)	FCM	Hu
RN008P	IGF2BP2/IMP2	IPP, RIP, WB	Hu, Mo, Rt	M047-A48	Myc (Alexa Fluor 488)	FCM, ICC		MC-3279	PTGDR/DP	IHC	Hu
RN009P	IGF2BP3/IMP3	IPP, RIP, WB	Hu, Mo	M047-9	Myc (Magnetic beads)	IPP		MC-962	PTGER1/EP1	IHC	Hu
K0159-3	IKKgamma	IHC, IPP, WB	Hu, Mo, Rt	CY-P1038	NAMPT	ELISA, WB	Hu	MC-971	PTGER2/EP2	IHC	Hu

Please refer to mblint.com for a complete listing of our portfolio of Research Use Only and Clinical Diagnostic Products.

FEATURED PRODUCTS

ANTIBODIES											
Code No.	Antigen Target	Application	Species Reactivities	Code No.	Antigen Target	Application	Species Reactivities	Code No.	Antigen Target	Application	Species Reactivities
MC-3890	PTGER4/EP4	IHC	Hu	BMP064	SLC22A12/URAT1	FCM, ICC, IHC	Hu	PM022	T7	IPP, WB	
MC-3898	PTGER4/EP4	ICC , IHC	Hu	BMP065	SLC22A13/ORCTL3/ OCTL1	FCM, ICC, IHC	Hu	MC-2041	TAAR1/TA1	IHC, WB	Hu
MC-4395	PTGIR	IHC	Hu	MC-9777	SLC29A1/ENT1	IHC	Hu	MC-2042	TAAR1/TA1	IHC, WB	Hu
M056-3	RAIDD	WB	Hu	BMP027	SLC2A9/GLUT9	FCM, ICC, IHC, WB	Hu	K0137-3	TAP2	IHC, IPP, WB	Hu
D223-3	Reelin/CR-50	ICC, IHC, IPP, WB	Mo	BMP081	SLC38A2/SNAT2	FCM, ICC, IHC, WB	Hu	MC-1992	TAS1R1	FCM, IHC	Hu
PM047	Renilla Luciferase	ICC, IPP, WB	Renilla reniformis	BMP052	SLC6A14	FCM, ICC, IHC, WB	Hu	MC-2007	TAS1R2	IHC	Hu
M155-3	RFP	ICC, WB		BMP053	SLC6A19	FCM, ICC, IHC	Hu	MC-5060	TAS1R3	IHC, WB	Hu
M165-3	RFP	IPP		BMP056	SLC7A10/Asc-1	FCM, ICC, IHC	Hu	K0028-3	TCL1	FCM, IHC, WB	Hu
PM005	RFP	ICC, IHC, WB		MC-2668	SMOH	IHC, WB	Hu	MC-1214	TM7XN1/GPR56	IHC	Hu
M165-8	RFP (Agarose)	IPP		K0175-3	SOCS-1	WB	Mo	592	TRAF2	WB	Hu
M165-9	RFP (Magnetic beads)	IPP		K0175-6	SOCS-1 (Biotin)	WB	Mo	597	TRAF6	WB, IPP	Mo
D139-3	Ring1B	IPP, WB	Hu, Mo, Ha	K0180-3	SREBP-2	ICC, WB	Hu	M092-3	TRAF6	IPP, WB	Mo
MC-5200	RORC	IHC	Hu	MC-998	SSTR2	IHC	Hu	K0204-3	Txnip/VDUP1	IPP, WB	Hu, Mo
MC-5214	RORC	IHC	Hu	MC-4148	SSTR4	IHC	Hu	K0205-3	Txnip/VDUP1	IHC, IPP, WB	Hu, Mo, Rt
PD027	Rubicon	IPP, WB	Hu	D065-3	ST2	FCM, IHC, IPP, WB	Hu	MK-11-3	Ubiquitin	WB	Hu, Bo
D207-3	Runx	WB	Hu, Mo	D066-3	ST2	ELISA, FCM, IPP, WB	Hu	MK-12-3	Ubiquitin	ICC, IPP, WB	Hu, Mo, Rt, Bo
D130-3	Runx2/Cbfa1	ICC, IPP, WB	Hu, Mo	D067-3	ST2	FCM, IPP, WB	Hu	M160-3	UVRAG	WB	Hu, Mo, Rt, Ha
D138-3	Sap155	WB	Hu, Mo, Ha	D067-4	ST2 (FITC)	FCM, IPP, WB	Hu	M167-3	V5	ICC, IPP, WB	
D221-3	Sap155	ICC, IPP, WB	Hu, Mo	D067-5	ST2 (PE)	FCM, IPP, WB	Hu	PM003	V5	IPP, WB	
M061-3	Selenium Binding rotein	IHC, WB	Hu, Mo, Rt	RN012P	STAU1	IPP, RIP, WB	Hu	PM003-8	V5 (Agarose)	IPP	
D152-3	Sema4A	FCM, IPP	Hu, Mo	RN013P	STAU2	IPP, RIP, WB	Hu	PM003-7	V5 (HRP-DirecT)	WB	
PD029	Sendai Virus	ICC, WB	Sendai Virus	M113-3	SUMO-1	ICC, WB	Hu, Mo, Rt	M167-9	V5 (Magnetic beads)	IPP	
CY-P1016	SIRT1	ICC, IPP	Hu	M114-3	SUMO-2/3	ICC, WB	Hu, Mo, Rt	MC-1297	VIPR1/RDC1	IHC	Hu
BMP079	SLC17A9 isoform 2 (VNUT)	FCM, IHC	Hu	CM004-3	SynCAM/TSCL1/ CADM1	FCM, ICC, IHC, IPP, WB	Hu, Mo	MC-9630	WNT16	IHC	Hu
BMP024	SLC1A7/EAA5	FCM, ICC, IHC, WB	Hu	CM005-3	SynCAM/TSCL1/ CADM1	FCM	Hu	M044-3	XIAP/MIHA/ILP-a	IHC, WB	Hu, Mo, Rt

Please refer to mblintl.com for a complete listing of our portfolio of Research Use Only and Clinical Diagnostic Products.

KITS			
Code No.	Product Name	Code No.	Product Name
8450	Acetylcholinesterase Rapid Staining Kit	CY-8066	CircuLex™ CML/Ne-(carboxymethyl) lysine ELISA Kit
CY-1168	CycLex® AKT/PKB kinase Assay/Inhibitor Screening Kit	CY-1175	CycLex® Protein Kinase C Superfamily Assay Kit
CY-1182	CycLex® AMPK Kinase Assay Kit	CY-1161	CycLex® cyclic GMP dependent protein kinase (cGK) Assay Kit
CY-8069	CircuLex™ Anti-CML rat autoantibody ELISA Kit	CY-9050	CircuLex™ DJ-1/PARK7 ELISA Kit
7635	ApoE4/Pan-ApoE ELISA Kit	7618E	ECP ELISA Kit
4700	MEBCYTO Apoptosis kit	7630	EDN ELISA Kit
8445	Apoptosis kit Direct	CY-8077	CircuLex™ Mouse FABP4/AFABP ELISA Kit 96 Assays
8441	Apoptosis kit-II	CY-8056	CircuLex™ Mouse FABP5/E-FABP/mal1 ELISA Kit
CY-1173	CycLex® CaM kinase II Assay Kit	5321	Ab-Match ASSEMBLY Human FAM3D Kit
CY-1170	CycLex® Casein Kinase2 (CK2) Assay/Inhibitor Screening kit	CY-1150	CycLex® HDACs Deacetylase Fluorometric Assay Kit
4800	APOPCYTO Caspase-3 Colorimetric Assay Kit	CY-8071	CircuLex™ High-Sensitivity CRP (C-Reactive Protein) ELISA Kit
4815	APOPCYTO Caspase-3 Fluorometric Assay Kit	CY-1143	CycLex® Histone H2A.X Phosphorylation Cellular ELISA Kit
4825	APOPCYTO Caspase-9 Fluorometric Assay Kit	7620	Human IL-18 ELISA Kit
CY-8080	CircuLex CD5L/Spc ELISA kit	7625	Mouse IL-18 ELISA Kit
5235	MESACUP Cdc2 Kinase Assay	7650	Human IL-33 Cytokine domain Detection Kit
CY-1355	CycLex® Cdc25 Family Fluorometric Assay Kit	CY-8078	CircuLex™ Mouse/Rat PCSK9 ELISA Kit
CY-1164	CycLex® Cdc2-Cyclin B Kinase Assay Kit	CY-1253	NAD+/NADH Colorimetric Assay Kit
CY-1142	CycLex® Cellular BrdU ELISA Kit	CY-1251	CycLex® NAMPT Colorimetric Assay Kit
CY-1140	CycLex® Cellular Histone Acetylation Assay Kit	CY-8070	CircuLex™ NGAL/Lipocalin-2 ELISA Kit
CY-1141	CycLex® Cellular UV DNA-Damage Detection Kit	CY-1252	CycLex® NMNAT Colorimetric Assay Kit
CY-8074	CircuLex Human Chitotriosidase ELISA Kit	5323	Ab-Match ASSEMBLY Human PAP1/REG3α Kit
CY-1249	CycLex® Chitotriosidase Fluorometric Assay Kit	CY-8079	CircuLex™ Human PCSK9 ELISA Kit

RECOMBINANT PROTEIN			
Code No.	Product Name	Code No.	Product Name
CY-E113	CaM Kinase II Positive control	B003-5	Human IL-18 (without BSA)
CY-E114	Cdc2-Cyclin B Positive control	B004-5	Mouse IL-18 (without BSA)
CY-E1161-1	cGK positive control (Catalytic domain)	B003-2	Human IL-18 (without BSA) Liquid
CY-E1161-2	cGK positive control (Full length)	B004-2	Mouse IL-18 (without BSA) Lyophil.
CY-E1170-1	CK2 (alpha/beta) Positive Control	PM036-PN	LC3 Positive control
CY-R2052	CML-BSA [N-(Carboxymethyl) lysine-BSA]	CY-R2340	LDLR EGF-AB domain
CY-R2056	Glucose-AGE-BSA	CY-R2341	LDLR EGF-AB domain, Myc-tagged
B001-5	Human IL-18	CY-E1251	NAMPT (Nicotinamide Phosphoribosyltransferase)
B002-5	Mouse IL-18	CY-R2331	PCSK9 D374Y

FEATURED PRODUCTS

CoralHue® Fluorescent protein vectors

Fluorescent protein	Abbr.	Oligomerization	Excitation maxima (nm)	Emission maxima (nm)	Product Code				
					S1	MC1	MN1	MCLinker	MNLinker
Midoriishi-Cyan	MiCy1	Dimer	472	495	AM-V0061				
	mMiCy1	Monomer	470	496	AM-V0111				
	hmMiCy1	Monomer	470	496	AM-V0115 AM-V0116 AM-V0119 AM-V0110				
Umikinoko-Green	mUkG1	Monomer	483	499	AM-V0161				
	hmUkG1	Monomer	483	499	AM-V0164	AM-V0165	AM-V0166		
Azami-Green	AG	Tetramer	492	505	AM-V0021				
	mAG1	Monomer	492	505	AM-V0031	AM-V0032	AM-V0033		
	hmAG1	Monomer	492	505	AM-V0034	AM-V0035	AM-V0036	AM-V0039	AM-V0030
Kusabira-Orange	KO1	Dimer	548	561	AM-V0041				
	mKO1	Monomer	548	559	AM-V0051	AM-V0052	AM-V0053		
	mKO2	Monomer	551	565	AM-V0141				
	hKO1	Dimer	548	561	AM-V0044	AM-V0045	AM-V0046		
	hmKO1	Monomer	548	559	AM-V0054	AM-V0055	AM-V0056	AM-V0059	AM-V0050
	hmKO2	Monomer	551	565	AM-V0145 AM-V0146 AM-V0149 AM-V0140				
Keima-Red	dKeima570	Dimer	440	570	AM-V0121				
	hdKeima570	Dimer	440	570	AM-V0124				
	dKeima-Red	Dimer	440	616	AM-V0101				
	mKeima-Red	Monomer	440	620	AM-V0091				
	hdKeima-Red	Dimer	440	616	AM-V0104				
	hmKeima-Red	Monomer	440	620	AM-V0094				
Dronpa Green	DG1	Monomer	503	518	AM-V0071	AM-V0072	AM-V0073		
	hDG1	Monomer	503	518					
	DG3	Monomer	491	514	AM-V0131				
Kaede	Kaede	Tetramer	508/572	518/580	AM-V0011	AM-V0012	AM-V0013		
Kikume Green-Red	KikGR1	Tetramer	507/583	517/593	AM-V0081	AM-V0082	AM-V0083		
	mKikGR1	Monomer	505/580	517/591	AM-V0151				
	hKikGR1	Tetramer	507/583	517/593	AM-V0084	AM-V0085	AM-V0086	AM-V0089	AM-V0080
	hmKikGR1	Monomer	505/580	517/591	AM-V0159 AM-V0150				

S1: Vectors for subcloning

MC1, MN1: Expression vectors

MCLinker, MNLinker: Expression vectors with flexible linkers

h: Humanized-codon

Please refer to mblint.com for a complete listing of our portfolio of Research Use Only and Clinical Diagnostic Products.

Organelle targeting vectors

Fluorescent protein	Abbr.	Oligomerization	Excitation maxima (nm)	Emission maxima (nm)	Product Code			
					Mitochondria	Endoplasmic reticulum	Plasma membrane	Nucleoplasm
Azami-Green	AG	Tetramer	492	505				
	mAG1	Monomer	492	505	AM-V0201	AM-V0202	AM-V0203	
Kusabira-Orange	KO1	Dimer	548	561				
	mKO1	Monomer	548	559	AM-V0221	AM-V0222	AM-V0223	
Keima-Red	mKeima-Red	Monomer	440	620	AM-V0251			
	hdKeima-Red	Dimer	440	616				

FUCCI Protein Vectors

Fluorescent protein	Abbr.	Oligomerization	Excitation maxima (nm)	Emission maxima (nm)	Fluorescence quantum yield	pH sensitivity	Product Code	
							Cloning	Expression
S/G2/M Green	mAG1-hGem (1-110)	Monomer	492	505	0.74	pKa=5.8	AM-V9014	AM-V9010 (Hygromycin) AM-V9016
S/G2/M Green (N+C)	mAG1-hGem (1-60)	Monomer	492	505	0.74	pKa=5.8	AM-V9034	AM-V9030 (Hygromycin)
G1 Orange	mKO2-hCdt1 (30-120)	Monomer	551	565	0.62	pKa=5.5	AM-V9001	AM-V9003

FEATURED PRODUCTS

Please refer to mblintl.com for a complete listing of our portfolio of Research Use Only and Clinical Diagnostic Products.

* Products listed are intended for use in diagnostic procedures

IVD AUTOIMMUNE					
Code No.	Product Name	Size / Description	Code No.	Product Name	Size / Description
IVD Autoimmune ELISA Kits			ANA SUBSTRATE SLIDES (IFA)		
RG-M7593-D*	DSG 1 & DSG 3 ELISA TEST SYSTEM (US only)	96 well	AN-1006*	Antinuclear Antibody (HEp-2)	6 well
RG-M7880E	MESACUP-2 Desmoglein TEST "Dsg1"	48 well	AN-1012*	Antinuclear Antibody (HEp-2)	12 well
RG-M7885E	MESACUP-2 Desmoglein TEST "Dsg3" (CE)	48 well	AN-1016*	Antinuclear Antibody (HEp-2)	16 well
RG-M7612-D*	MESACUP BP180 ELISA Kit	48 well	ANA CONTROL SERA (IFA)		
RG-M7613-D*	MESACUP BP230 ELISA Kit	48 well	ANN-1010*	ANA Negative	0.5 mL
RG-7845R2	Anti-TypeVI collagen ELISA Kit (RUO)	48 well	ANP-1040*	ANA Positive (Homogeneous)	0.5 mL
RG-7115R	Anti-Skin Profile ELISA Kit (RUO)	12 x 8 well	NUC-1042*	ANA Nucleolar	0.5 mL
RG-M7836-D*	RNA Polymerase III ELISA Kit	48 well	ACA-1043*	ANA Anti-Centromere (ACA)	0.5 mL
RG-7841R	Anti-Synthetase ELISA Kit (RUO)	48 well	RNP-1044*	ANA Ribonucleoprotein (RNP)	0.5 mL
ANA TEST SYSTEMS (IFA)			SSA-1045*	ANA Sjögren's Syndrome A (SS-A)	0.5 mL
ANK-120*	ANA (HEp-2) Test System	120 test	SCL-1046*	ANA Scleroderma-70 (Scl-70)	0.5 mL
ANK-60*	ANA (HEp-2) Test System	60 test	SSB-1047*	ANA Sjögren's Syndrome B (SS-B)	0.5 mL
IVD INFECTIOUS DISEASE IFA					
Code No.	Product Name	Size / Description	Code No.	Product Name	Size / Description
INFECTIOUS DISEASE TEST SYSTEMS			SPECIAL ANTIGEN SUBSTRATE SLIDES (contd)		
CMG-120*	Cytomegalovirus IgG	120 Test	MP-1206*	Mycoplasma pneumoniae Antigen Substrate Slide	6 well
EBG-120*	Epstein Barr Virus VCA, IgG	120 Test	CONTROL SERA		
EBM-120*	Epstein Barr Virus VCA, IgM	120 Test	ADN-3110*	Adenovirus	Negative Control
HS1G-120*	Herpes Simplex Virus Type 1, IgG	120 Test	ADG-3120*	Adenovirus	Positive Control, IgG
HS2G-120*	Herpes Simplex Virus Type 2, IgG	120 Test	BN-0610	Bartonella henselae (RUO)	Negative Control
MEG-120*	Measles (Rubeola) Virus IgG	120 Test	BHG-1620	Bartonella henselae (RUO)	Positive Control, IgG
MEG-60*	Measles (Rubeola) Virus IgG	60 Test	BBN-6110*	Borrelia burgdorferi	Negative Control
MEM-120*	Measles (Rubeola) Virus IgM	120 Test	BBG-6120*	Borrelia burgdorferi	Positive Control, IgG
MEM-60*	Measles (Rubeola) Virus IgM	60 Test	BBM-6130*	Borrelia burgdorferi	Positive Control, IgM
MUG-120*	Mumps Virus, IgG	120 Test	CHN-4110*	Chlamydia	Negative Control
MUG-60*	Mumps Virus, IgG	60 Test	CHG-4120*	Chlamydia	Positive Control, IgG
VIRAL ANTIGEN SUBSTRATE SLIDES			CHM-4130*	Chlamydia	Positive Control, IgM
AD-3112*	Adenovirus	12 well	CPN-4210	Chlamydia pneumonia (TWAR) (RUO)	Negative Control
CB-3312*	Coxsackievirus Group B Screen	12 well	CPG-4220	Chlamydia pneumonia (TWAR) (RUO)	Positive Control, IgG
CB-3306*	Coxsackievirus Group B Screen	6 well	CPM-4230	Chlamydia pneumonia (TWAR) (RUO)	Positive Control, IgM
CM-2012*	Cytomegalovirus	12 well	CBN-3310*	Coxsackievirus Group B Types 1-6	Negative Control
EC-4412*	Echovirus Screen	12 well	CBG-3320*	Coxsackievirus Group B Types 1-6	Positive Control, IgG
EB-5012*	Epstein-Barr Virus (EBV), VCA	12 well	CMN-2010*	Cytomegalovirus	Negative Control
EAD-5412	Epstein-Barr Early Antigen, Diffuse Only (RUO)	12 well	CMG-2020*	Cytomegalovirus	Positive Control, IgG
EAR/D-5312	Epstein-Barr Early Antigen, Restricted & Diffuse (RUO)	12 well	CMM-2030*	Cytomegalovirus	Positive Control, IgM
NA-5112*	EBV Nuclear Antigen (EBNA)	12 well	EBN-5010	EBV, Early Antigen-Diffuse (RUO)	Negative Control
HS1-3012*	Herpes Simplex Virus Type 1	12 well	EAD-5440	EBV, Early Antigen-Diffuse (RUO)	Positive Control, IgG
HS2-4012*	Herpes Simplex Virus Type 2	12 well	EBN-5010*	Epstein Barr Virus – VCA	Negative Control
HHV6-4312	Human Herpesvirus Type 6 (RUO)	12 well	EBG-5020*	Epstein Barr Virus – VCA	Positive Control, IgG
IA-1112*	Influenza A Virus	12 well	EBM-5030*	Epstein Barr Virus – VCA	Positive Control, IgM
IB-2112*	Influenza B Virus	12 well	EBN-5010	EBV Early Antigen – Restricted (RUO)	Negative Control
ME-6012*	Measles (Rubeola) Virus	12 well	EAR-5340	EBV Early Antigen – Restricted (RUO)	Positive Control, IgG
ME-6006*	Measles (Rubeola) Virus	6 well	EBN-5010	EBV Early Antigen – Diffuse (RUO)	Negative Control
MU-8012*	Mumps Virus	12 well	EAD-5440	EBV Early Antigen – Diffuse (RUO)	Positive Control, IgG
MU-8006*	Mumps Virus	6 well	EBN-5010*	EBV Nuclear Antigen (EBNA)	Negative Control
P1-7112*	Parainfluenza Virus Type 1	12 well	NA-5140*	EBV Nuclear Antigen (EBNA)	Positive Control, IgG
P2-8112*	Parainfluenza Virus Type 2	12 well	ECN-4410*	Echovirus Types 4, 6, 9, 11, 30 & 34	Negative Control
P3-9112*	Parainfluenza Virus Type 3	12 well	ECG-4420*	Echovirus Types 4, 6, 9, 11, 30 & 34	Positive Control, IgG
RS-9012*	Respiratory Syncytial Virus	12 well	HPN-3210	Helicobacter pylori (RUO)	Negative Control
VZ-7012*	Varicella Zoster Virus	12 well	HPG-3220	Helicobacter pylori (RUO)	Positive Control, IgG
VZ-7006*	Varicella Zoster Virus	6 well	HSM-3510*	Herpes Simplex Virus Types 1 & 2	Negative Control
SPECIAL ANTIGEN SUBSTRATE SLIDES			HSG-3520*	Herpes Simplex Virus Types 1 & 2	Positive Control, IgG
BB-6112*	Borrelia burgdorferi	12 well	HSM-3530*	Herpes Simplex Virus Types 1 & 2	Positive Control, IgM
BH-1612	Bartonella henselae (RUO)	12 well	HH6N-4310	Human Herpesvirus Type 6 (RUO)	Negative Control
BH-1606	Bartonella henselae (RUO)	6 well	HHG-4320	Human Herpesvirus Type 6 (RUO)	Positive Control, IgG
CH-4112*	Chlamydia (LGV-1)	12 well	IAN-1110*	Influenza A Virus	Negative Control
CP-4212	Chlamydia pneumoniae (RUO)	12 well	IAG-1120*	Influenza A Virus	Positive Control, IgG
HP-3212	Helicobacter pylori (RUO)	12 well	IBN-2110*	Influenza B Virus	Negative Control
MP-1212*	Mycoplasma pneumoniae	12 well	IBG-2120*	Influenza B Virus	Positive Control, IgG
ANA COMPONENTS & CONJUGATES (IFA)					
CCP-9970*	Anti-human IgG Conjugate (heavy and light chain specific)	3.5 mL	CCP-9920*	Anti-human IgG Conjugate (heavy and light chain specific)	20 mL
CCP-9940*	Anti-human IgG Conjugate (heavy and light chain specific)	40 mL	CCP-9960*	Anti-human IgG Conjugate (heavy and light chain specific)	60 mL
DIL-9993*	IFA Diluent	60 mL	DIL-9994*	IFA Diluent	125 mL
DIL-9995*	IFA Diluent	250 mL	PBS-9990*	Phosphate Buffered Saline (PBS), 1L	1 packet
PBS-9991*	Phosphate Buffered Saline (PBS), 5L	1 packet	MM-9985*	Mounting Medium	3.5 mL dropper bottle
MM-9986*	Mounting Medium	20 mL dropper bottle			
CONTROL SERA (contd)					
MEN-6010*	Measles (Rubeola)	Negative Control	MEG-6020*	Measles (Rubeola)	Positive Control, IgG
MEM-6030*	Measles (Rubeola)	Positive Control, IgM	MUN-8010*	Mumps Virus	Negative Control
MUG-8020*	Mumps Virus	Positive Control, IgG	MUM-8030*	Mumps Virus	Positive Control, IgM
MPN-1210*	Mycoplasma pneumoniae	Negative Control	MPG-1220*	Mycoplasma pneumoniae	Positive Control, IgG
MPM-1230*	Mycoplasma pneumoniae	Positive Control, IgM	PN-8510*	Parainfluenza Virus Types 1, 2 & 3	Negative Control
PG-8520*	Parainfluenza Virus Types 1, 2 & 3	Positive Control, IgG	RSN-9010*	Respiratory Syncytial Virus	Negative Control
RSG-9020*	Respiratory Syncytial Virus	Positive Control, IgG	VZN-7010*	Varicella Zoster Virus	Negative Control
VZG-7020*	Varicella Zoster Virus	Positive Control, IgG	VZM-7030*	Varicella Zoster Virus	Positive Control, IgM
ANTIGEN CONTROL SLIDES					
QAD-3102*	Adenovirus	2 well	QCH-4102*	Chlamydia – Inclusions	2 well
QCHE-4502*	Chlamydia – Elementary Bodies	2 well	QCM-2002*	Cytomegalovirus	2 well
QME-6002*	Measles (Rubeola) Virus	2 well	QMU-8002*	Mumps Virus	2 well
QRS-9002*	Respiratory Syncytial Virus	2 well	QRP-6314*	Respiratory Panel	14 well
IFA COMPONENTS & CONJUGATES					
CCG-9972*	Anti-human IgG (heavy chain specific) for detecting IgG specific antibodies	3.5 mL	CCG-9922*	Anti-human IgG (heavy chain specific) for detecting IgG specific antibodies	20 mL
QEP-6604*	Enterovirus Panel	4 well	QHS-3504*	Herpes simplex Virus Types 1 and 2	4 well
QAB-1504*	Influenza A and Influenza B Virus	4 well	QP-8506*	Parainfluenza Virus Types 1, 2, and 3	6 well
QRP-6314*	Respiratory Panel	14 well			
IFA COMPONENTS & CONJUGATES					
CXCG-9972*	Anti-human IgG (heavy chain specific) for EBV IgG testing	3.5 mL	CXCM-9974*	Anti-human IgG (heavy chain specific) for EBV IgG testing	3.5 mL
CGC-9979*	Anti-Guinea Pig (C3) Conjugate for use in EBNA testing	3.5 mL			

SUPPORT

SALES SUPPORT

We do more than sell products. All of our commercial teams possess advanced scientific degrees and extensive laboratory experience. Our goal is to serve as advisors and consultants to assist you in project planning and product recommendations. To have your questions answered or to receive a pricing quote, please contact our team.

By email: sales@mblintl.com

By phone: 1-800-200-5459, Option 1

By fax: 847-544-5051



For international customers, please contact your local distributor. Please visit mbltl.com for a complete listing.

TECHNICAL SUPPORT

MBL International Corporation recruits only the best scientific talent to provide answers to all of your questions regarding the use or applications of our products. We offer a variety of convenient methods to contact our technical support team.

By email: tech@mblintl.com

By phone: 1-800-200-5459, Option 3



CUSTOMER SUPPORT

From order to delivery and at every point in between, our world-class customer service team is dedicated to ensure that your orders are processed efficiently and accurately. Customer service representatives are available.

By email: customerservice@mblintl.com

By phone: 1-800-200-5459, Option 8

(8:30am - 6:00pm EST, Monday-Friday)

By fax: 847-544-5051

Contact your local distributor for assistance and your inquiries will be directed appropriately.



Distributed by:



Tel.: 915 515 403
Fax: 914 334 545
e-mail: info@bionova.es
www.bionova.es



MBL International
15A Constitution Way
Woburn, MA 01801 USA
Tel: 1-800-200-5459
mblintl.com



Tel.: 915 515 403
Fax: 914 334 545
e-mail: info@bionova.es
www.bionova.es