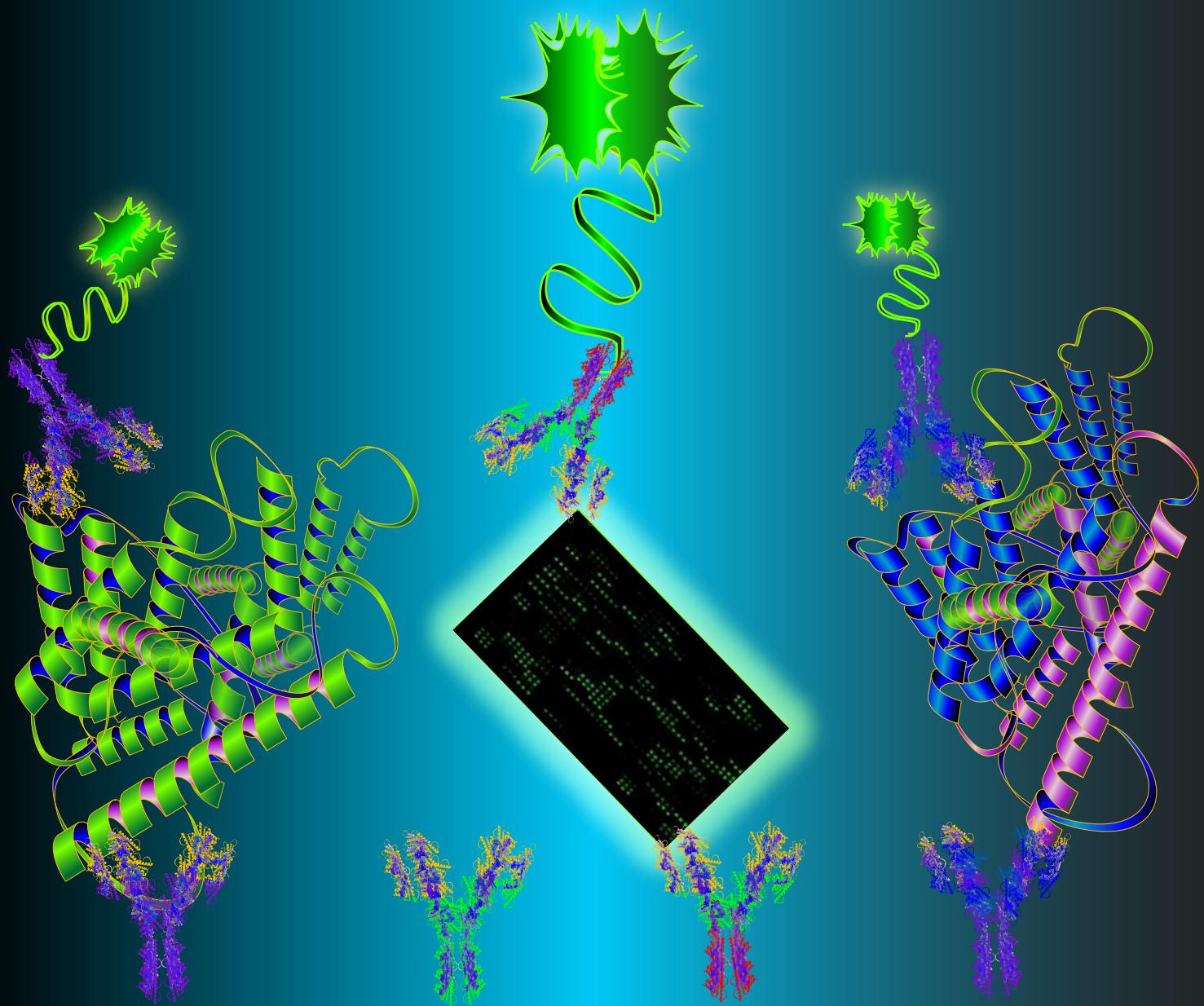


Adipokines and Obesity

Tools for Research

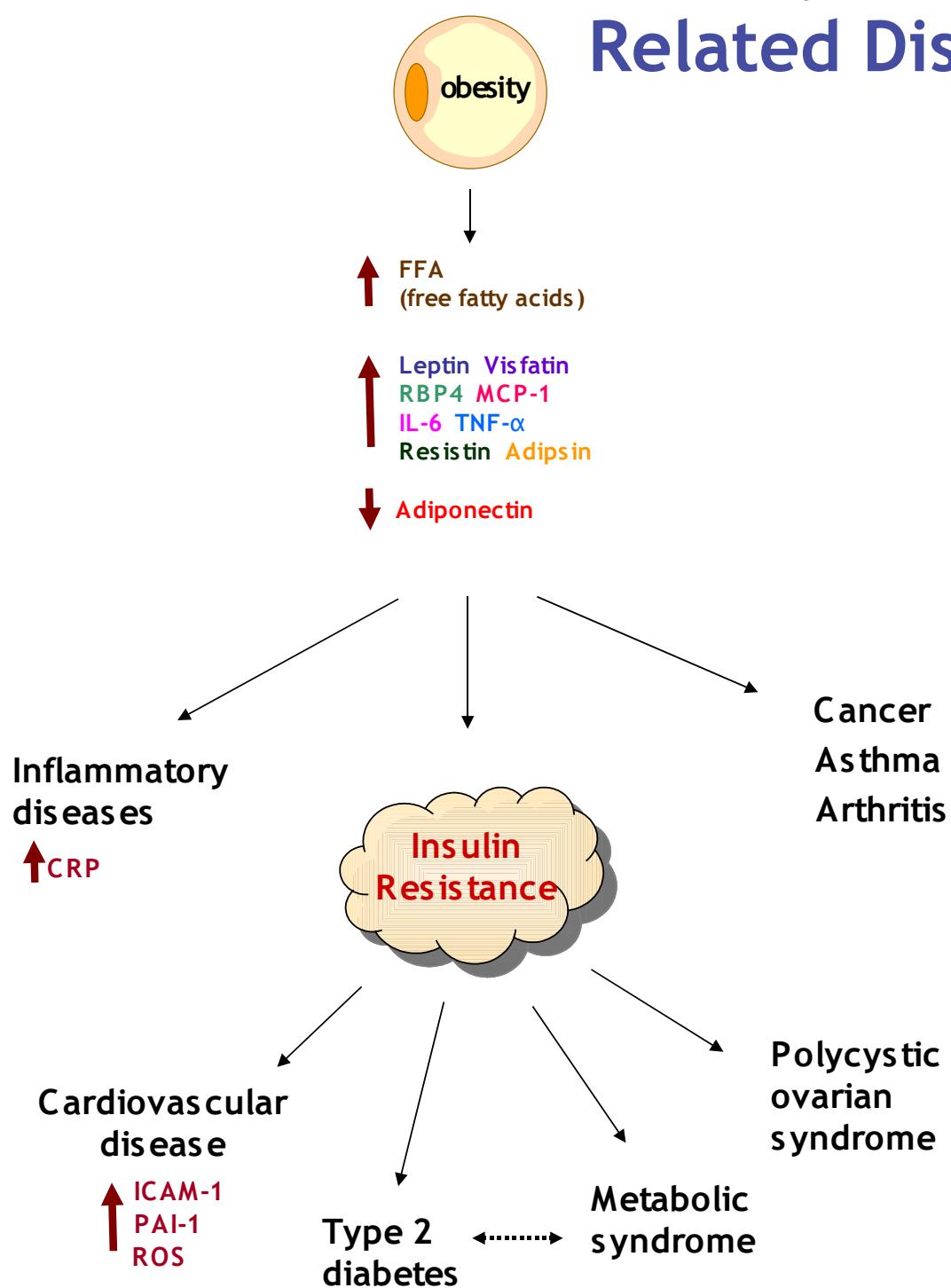


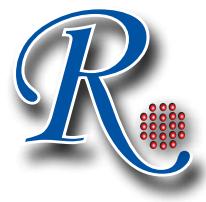
 **RayBiotech, Inc.**
the protein array pioneer company

www.RayBiotech.com
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Email: info@raybiotech.com

Accelerate your research on

Obesity and Related Diseases





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Brief



ADIPOKINES:

NEW AREAS OF RESEARCH ON THE OBESITY FRONTIER

The area of obesity research is getting hotter ever over the past years. The driving force can be manifold. First, obesity is a chronic disease that has become a major health problem in most industrialized countries because of its high prevalence, medical illnesses, and economic impact. In the United States, 26% of adults are reported to be obese and approximately 60% of adults are overweight. It is estimated that obesity is responsible for 300,000 deaths per year, and that the direct costs (medical expenses) of obesity exceed \$50 billion per year, ranking obesity as the second most expensive of all chronic diseases.

Second, obesity is associated with increased occurrence of numerous diseases including hypertension, dyslipidaemia, insulin resistance, type 2 diabetes, and metabolic syndrome. Obesity also predisposes to several other independent diseases like asthma, breast cancer, stroke, osteoarthritis, and non-alcoholic liver steatosis. In addition, obesity is accompanied by generalized inflammation, characterized by increased plasma CRP levels as well as by dysregulated cytokine production by monocytes, lymphocytes and other immune cells. Moreover, the presence of obesity has long been associated with the presence of endothelial and vascular dysfunction, which provides partial explanation of how does obesity may lead to cardiovascular diseases.

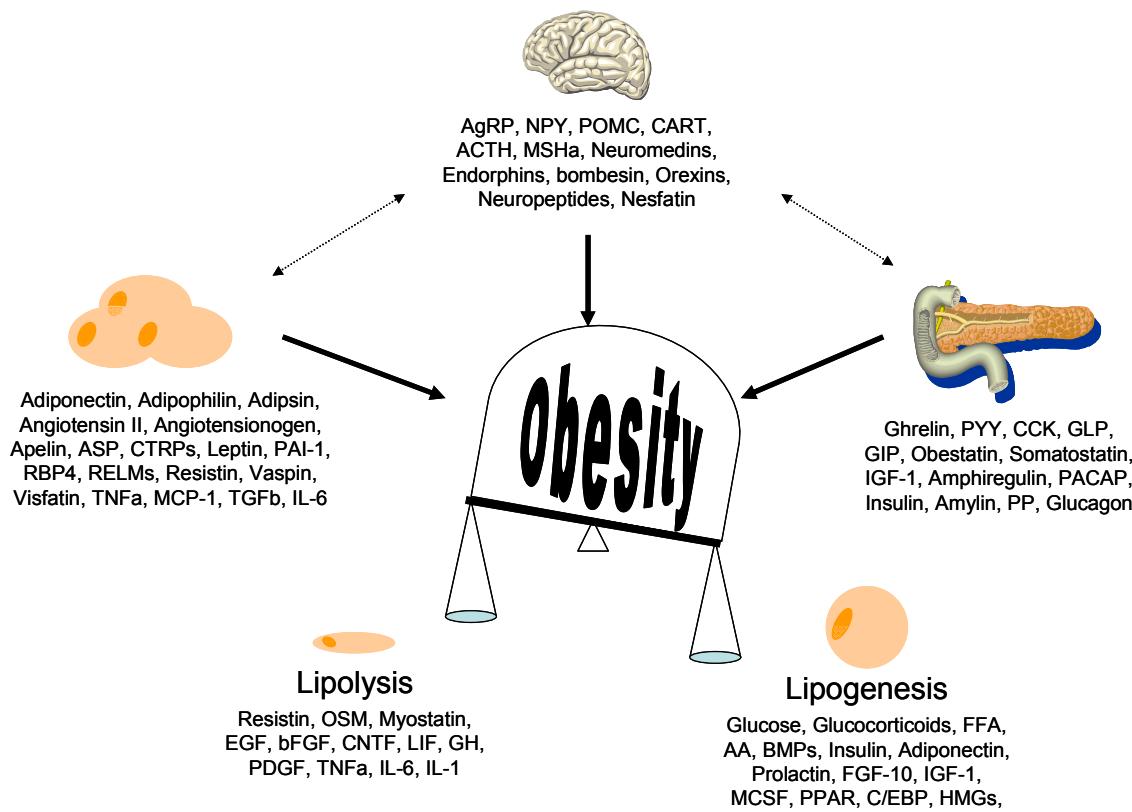
Third, adipose tissue is no longer considered to be an inert energy storage organ, as recent studies have revealed that adipocytes are an active participant in regulating physiological and pathologic processes, including immunity and inflammation. There are two kinds of adipose tissues in mammals: white adipose tissue, which takes up the vast majority in the organism and is thought to be the site of energy storage, and brown adipose tissue, which is mainly found in human neonates and is important for the regulation of body temperature through non-shivering thermogenesis. In addition to the most abundant cell type, adipocytes, the white adipose tissue also contains endothelial cells, fibroblasts, leukocytes and most importantly macrophages whose number presented in the adipose tissue directly correlates with obesity. Many soluble factors have been identified from the adipose tissue and are so called as adipocytokines or adipokines. Some of the adipokines are mainly produced by the adipose tissue like leptin, resistin, adiponectin or visfatin, while others are also synthesized in other tissues like TNF- α , IL-6, MCP-1, and IL-1. Because all of these factors can act in an autocrine, paracrine or endocrine manner in the organisms, adipokines are thought to serve as mediators linking obesity, inflammation, immunity, and other obesity related diseases.

Obesity results from long-term positive energy imbalance: that is, energy intake is greater than energy expenditure which leads to lipogenesis (fat synthesis) over lipolysis (fat destruction). In the human body, homeostasis or the relative constancy of the internal environment is controlled by the central nervous system (CNS), among that the regulation of human appetite (feeding or fasting) is located in the hypothalamic arcuate nucleus. The arcuate nucleus produces neuropeptides and neurotransmitters which intertwine with the human immune system to form a neuroimmune network that mediates the physiological control of energy homeostasis.

There are two groups of hypothalamic neurons that influence food intake. When body energy is in surplus, the POMC/CART neurons produce anorexigenic (appetite decreasing) peptides. Pro-opiomelanocortin (POMC) and cocaine and amphetamine-regulated transcript (CART) are the two representatives of this group. POMC is a precursor protein, and the tissue-specific posttranslational processing of POMC yields various bioactive fragments, such as adrenocorticotropic hormone (ACTH), alpha-melanocortin stimulating hormone (MSH alpha), and beta-endorphin. Binding of these peptides to melanocortin receptors (MC3R, MC4R) induces a powerful anorectic effect. CART was also found to be co-localized with POMC, and its expression in the hypothalamus is up-regulated by psychostimulants such as cocaine and amphetamine. CART exerts an anorectic function, the genetic mutations of which lead to eating disorders including obesity and anorexia. Other anorexigenic neuropeptides include bombesin, cholecystokinin (CCK), motilin, nesfatin-1, neuropeptides Y and Y-like, serotonin, somatostatin, vasoactive intestinal peptide (VIP), and urocortin. The other group of hypothalamic neuron is called NPY/AgRP neurons. When body energy is in deficit, NPY/AgRP neurons express orexigenic (appetite stimulating) neuropeptides to stimulate food intake and decreased energy expenditure. Neurotransmitters falling into this group include neuropeptide Y (NPY) and agouti-related protein (AgRP), orexins, galanin, cannabinoids, and melanin concentrating hormone (MCH).

In addition to the neuromodulators, peripheral signals from the stomach/gut, pancreas, adipose tissue, and other endocrine glands (such as thyroid hormones, catecholamines, and gonadal steroids) may also act on the arcuate nucleus through either NPY/AgRP or the POMC/CART pathways. Apart from its well recognized digestive and absorptive functions, the gut also produces peptides that have autocrine, paracrine, and endocrine functions. Several dozens of gut hormones have been characterized, making the gut the largest endocrine organ in the body, with the adipose tissue being a close second. Some of the gut hormones such as CCK, glucagon-like peptide 1 (GLP-1), peptide YY (PYY), ghrelin, neuromedin B, gastric releasing peptide (GRP), and Apo A-IV were also found in the brain. Ghrelin is a 28aa orexigenic hormone predominantly produced in the stomach. Obestatin is a 23-residue peptide, derived from post-translational processing of the prepro-ghrelin gene. Obestatin has been initially reported to be the endogenous ligand for GPR39 for counteracting ghrelin-stimulated food intake. However, recent reports observed no effects of obestatin on GPR39-transfected cells in various functional assays. The function of obestatin still remains unknown. Other anorexigenic gut hormones include PYY, CCK, gastric inhibitory peptide (GIP), GLP-1, oxyntomodulin (OXM), Apo A-IV, enterostatin, and oleylethanolamide.



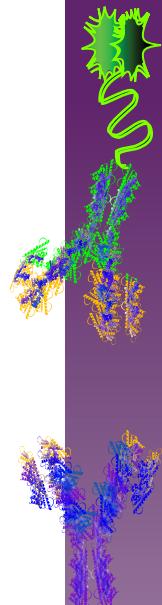


Insulin secreted from pancreas β -cell plays an important role in glucose homeostasis. Insulin is a 5.8 kDa hormone and is derived from the proinsulin precursor by removing the center portion of the molecule (C-peptide) and the joining of the remaining A- and B-chains through disulfide bonds. In insulin abundance the anorexigenic pathway prevails, with increased energy expenditure, increased thermogenesis and diminished food intake. Decreased insulin serum concentrations lead to activation of the orexigenic pathway, resulting in low metabolic rate and enhanced appetite. Obesity, in particular visceral obesity, is associated with resistance to the effects of insulin on peripheral glucose and fatty-acid utilization. Insulin resistance, together with the associated hyperinsulinaemia and hyperglycaemia, and the presence of pro-inflammatory mediators might lead to the development of type 2 diabetes mellitus and atherosclerotic cardiovascular disease. In addition to insulin, amylin, glucagon, and pancreatic polypeptide (PP) are among the other anorexigenic polypeptides produced by pancreas that inhibit food intake. Amylin is a 37-residue polypeptide hormone that is co-secreted with insulin from the pancreatic beta cells during meals. Amylin appears to work in concert with insulin to regulate plasma glucose concentrations in the bloodstream, suppressing the postprandial secretion of glucagon and slowing the rate of gastric emptying.

Peptides from the adipose tissue are attracting tremendous interest recently. Because adipokines can function as hormones to influence energy homeostasis and regulate neuroendocrine activity, they are thought to provide an important link between obesity, inflammatory disorders, metabolic syndrome, and cardiovascular diseases. Leptin and adiponectin are the best known adipokines predominantly produced by the adipose tissue. Leptin is coded by the *obese* (*ob*) gene, disruption of which leads to obesity. Leptin is primarily known as the negative regulator in food intake via the POMC/CART pathway. kinds of leptin receptors widely found throughout the central nerve system and the cardiovascular and immune system, indicating its wider range of biological activities. Adiponectin (also known as Acrp30, AdipoQ, APM-1 and GBP28) exists as a full-length 30kDa protein as well as a globular form containing only the C-terminal globular domain. The full-length adiponectin can exist as a trimer (LMW), a hexamer (MMW), or 12 to 18-mer (HMW). In contrast to the majority of secreted proteins from adipose tissue, which are elevated in obesity, adiponectin appears to be either decreased or unaltered. Adiponectin circulates at high concentrations in human serum (several milligram per milliliter) and is best known for its role in the regulation of insulin sensitivity.

Adipose tissue also secretes adiponectin, resistin, visfatin, vaspin, RBP-4, IL-1 β , IL-6, TNF α , MCP-1, and a number of other factors. Resistin is a small protein secreted by adipose tissue and circulates as a homodimer. Resistin receives its name from its apparent induction of insulin resistance in mice. Visfatin (also known as PBEF) is an insulin-mimetic adipokine that was originally discovered in liver, skeletal muscle, and bone marrow as a growth factor for B lymphocyte precursors. It is a nicotinamide phosphoribosyltransferase enzyme that catalyzes the first step in the biosynthesis of NAD from nicotinamide. Similar to insulin, visfatin enhanced *in vitro* glucose uptake by myocytes and adipocytes, and inhibited hepatocyte glucose release. Vaspin is an adipokine recently identified as a member of the serine protease-inhibitor family. It is strongly expressed in visceral adipose tissue and is stimulated in mouse and human obesity. RBP4 is a recently identified adipokine secreted by adipocytes. It belongs to the lipocalin family and is the specific carrier for retinol (vitamin A alcohol) in the blood. PAI-1 is strongly associated with visceral obesity, insulin resistance, and metabolic syndrome. PAI-1 plasma levels correlate with body mass index and increased waist circumference, and decrease after weight loss. TNF α expression is increased in the adipose tissue of obese subjects. It is thought to be a mediator of insulin resistance. A substantial amount of IL-6 is produced by adipose tissue. Plasma IL-6 correlates with obesity, insulin resistance, and cardiovascular disease. MCP-1 has been shown to impair insulin-stimulated glucose uptake in cultured adipocytes. MCP-1 is secreted by adipocytes, which attracts macrophages to adipose tissue and promotes the release of IL-1 and TNF α .

In effort to facilitate obesity research, Raybiotech provides not only specific antibodies and antigens, but also offers multiple levels of research kits. For quantitative purpose, we offer ELISA kits for individual proteins as well as adipokine Quantibody® arrays for detecting multiple factors in one experiment. For qualitative analysis, we offer sandwich ELISA-based arrays (membrane or glass) as well as label-based arrays. ■■■



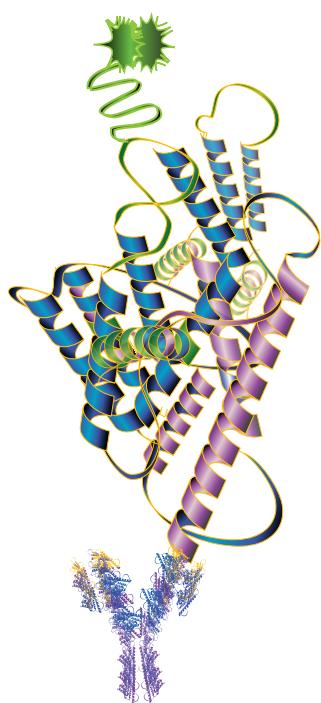


Product Guide

Adipokine	Label-based array	Sandwich Array	Quantitative Array	Peptide	Protein	Antibody	ELISA	EIA
ACTH	✓			H		H		
ADFP	✓			H	H			
Adiponectin (Acrp30)	✓	✓	✓	M,H	H, M	H	H	
Adipsin	✓		✓			H	H	
AgRP	✓				H	H		
Amylin	✓			H, R, F		H		
Angiotensin I	✓			H		H		
Angiotensin II	✓			H		H		H, M, R
Angiotensin III	✓			H		H		
Apelin	✓			H, M, R		H		H, M, R
C Reactive Protein	✓	✓	✓			H		
CART	✓			H,M,R				
CTRP3						H		
CTRP4						H		
Ghrelin	✓			H, R	H	H		H, M
GLP1	✓					H		
GLP2						H		
Glucagon	✓			H		H		
GRO alpha	✓				H	H		
Growth Hormone	✓	✓					H	
IFN-gamma	✓	✓				H	H, M	
IGFBP-1	✓	✓				H	H	
IGF-I	✓	✓	✓			H	H	
IL-1 beta	✓	✓	✓			H	H, M	
IL-10	✓	✓				H	H, M, R	
IL-6	✓	✓	✓			H	H, M	
IL-6 sR	✓	✓						
IL-8	✓	✓	✓			H	H	
Insulin	✓	✓	✓				H	
Insulin R	✓					H		
Leptin	✓	✓	✓	H, M, R	H, M, R	H, M, R	H, M	
LH	✓					H		
MCP-1	✓	✓	✓		H	H	H, M, R	
Nesfatin				H, M, R		H		H, M, R
NPY	✓					H, M, R		H, M, R
Obestatin				H, M, R		H		
Omentin				H, M, R		H		
PAI-1		✓	✓			H		
Peptide YY	✓			H		H		
POMC				H, M, R		H, M, R		
RBP4	✓			H	H	H		
RELMa				H, M, R		H, M, R		
RELMb	✓			H, M, R		H, M, R		
Resistin	✓	✓	✓		R	H	H	
S-100	✓					M		
Serum Amyloid A	✓	✓	✓					
TGFb	✓	✓					H	
TIMP-2	✓	✓				H	H, M	
TIMP-1	✓	✓			H	H	H, M, R	
TNFa	✓	✓	✓			H	H, M, R	
TSH	✓				H	H		
Urocortin				H				
Vaspin	✓			H, M, R		H		
VEGF	✓	✓				H	H, M, R	
Visfatin	✓				H	H, M		H, M, R

H = human M = mouse R = rat

Your Specific Need	Our Solution
A big net: screen as many factors as possible	Label-based arrays
Limited sample volume	Glass Slide-based arrays Label-based arrays (glass slide) Quantibody® arrays
No specialized equipment	Membrane-based arrays
Quantitative results	Quantibody® arrays
Specific proteins of interest	Custom arrays
No experience/ no time	Testing services
Validation of array results	ELISA Quantibody® arrays Antibodies for Western blot



RayBio® C-Series and G-Series

Adipokine Antibody Arrays

Sandwich-based

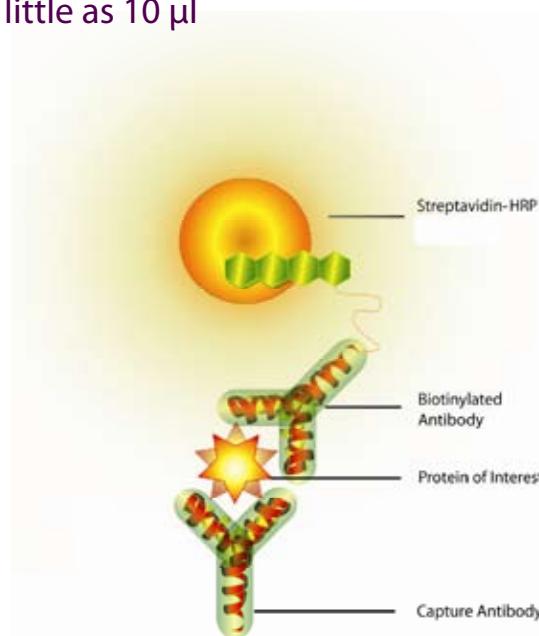
As the protein array pioneer company, RayBiotech provides the most comprehensive cytokine antibody array products in today's market. Using our patent pending technology, researchers can rapidly and accurately measure the expression levels of 62 different adipokines from a single sample.

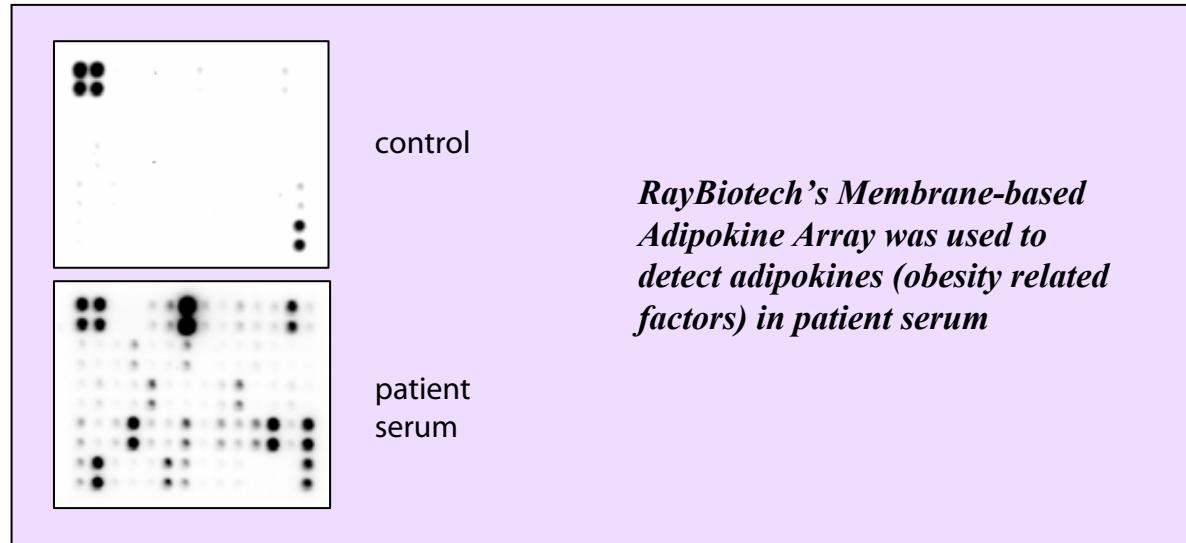
The technology is designed based on the sandwich immunoassay principle. A panel of antibodies is immobilized in specific spot locations on the surface of membrane or a glass chip. Incubation of array membranes with biological samples results in the capture of adipokines by corresponding antibodies. The bound proteins are then detected with a cocktail of biotinylated antibodies. Finally, signals are visualized using chemiluminescence, colorimetry, or fluorescence. ■

Product Highlights

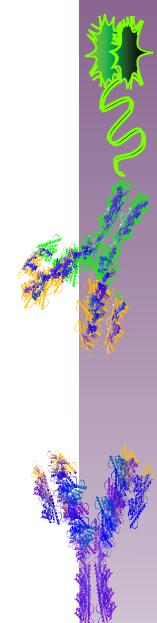
- High sensitivity: detects most proteins at pg levels
- Affordable enough for routine use
- High specificity
- May be used with diverse biological samples
- Customizable
- Membrane arrays require as little as 100 µl
- Glass slide arrays require as little as 10 µl

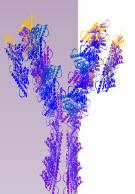
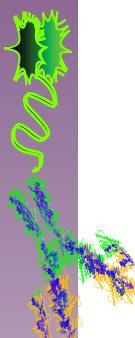
How it works



Representative Data

PLATFORM	MEMBRANE-BASED ARRAYS	GLASS CHIP-BASED ARRAYS
Major Feature	Antibodies spotted onto membranes	Antibodies spotted onto glass slide
	Chemiluminescence detection	Fluorescence detection
	Film processor or chemiluminescent imaging system required	Laser scanner required
Detection	Chemiluminescence (Optional: Colorimetric or Fluorescence)	Fluorescence detection (Optional: Chemiluminescence)
	Film processor Chemiluminescent imaging system	Laser scanner
Sample Volume	1 ml working solution (as little as 100 µl of original sample)	50 µl working solution (as little as 10 µl original sample)
Cost	Affordable	Very affordable (~20% lower than Membrane-based arrays)
Sample Sources	cell culture medium, serum, plasma, any other body fluids, cell lysate, tissue lysate	





Product list

Product	Cat #	Description	Size	Format	Species	Sample types
RayBio® Human Adipokine antibody array 1 (2)	AAH-ADI-1-2	simultaneous detection of 62 adipokine & obesity-related factors	2 array membranes for 2 samples	Membrane	Human	Any biological fluid (body fluids, lysates, cell culture supernates, etc.)
RayBio® Human Adipokine antibody array 1 (4)	AAH-ADI-1-4	simultaneous detection of 62 adipokine & obesity-related factors	4 array membranes for 4 samples	Membrane	Human	Any biological fluid (body fluids, lysates, cell culture supernates, etc.)
RayBio® Human Adipokine antibody array 1 (8)	AAH-ADI-1-8	simultaneous detection of 62 adipokine & obesity-related factors	8 array membranes for 8 samples	Membrane	Human	Any biological fluid (body fluids, lysates, cell culture supernates, etc.)
RayBio® Human Adipokine antibody array G series 1 (4)	AAH-ADI-G1-4	simultaneous detection of 62 adipokine & obesity-related factors	4 subarrays per chip for 4 samples	Glass chip	Human	Any biological fluid (body fluids, lysates, cell culture supernates, etc.)
RayBio® Human Adipokine antibody array G series 1 (8)	AAH-ADI-G1-8	simultaneous detection of 62 adipokine & obesity-related factors	8 subarrays per chip for 8 samples	Glass chip	Human	Any biological fluid (body fluids, lysates, cell culture supernates, etc.)
Analysis Tool for Human Adipokine Antibody Array	S02-AAH-ADI-1	Software tool for analysis of data from RayBio® Human Adipokine Antibody Array 1 - membrane				
Analysis Tool for Human Adipokine Antibody Array	S02-AAH-ADI-G1	Software tool for analysis of data from RayBio® Human Adipokine Antibody Array 1 - glass chip				

Antibody List

RayBio® Human Adipokine Antibody Array I

for simultaneous detection of 62 human adipokines

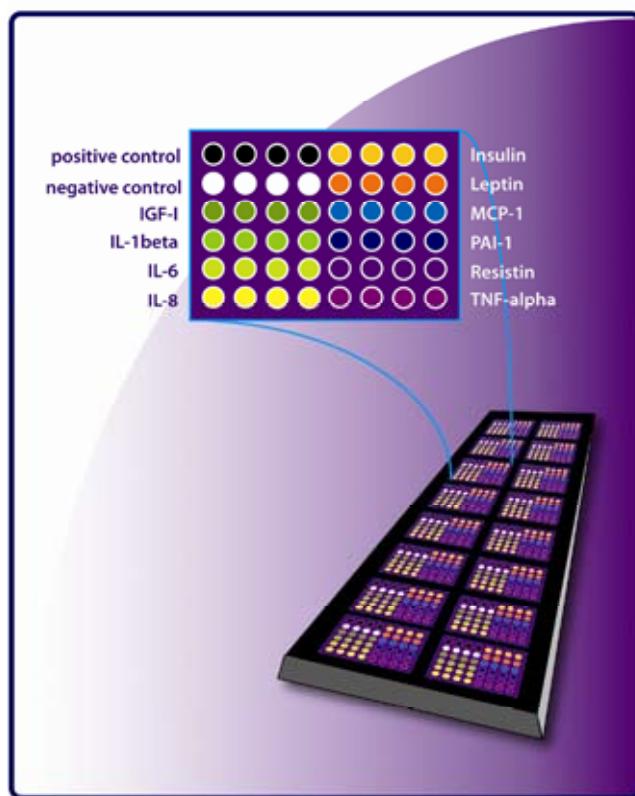
4-1BB	IGFBP-2	Leptin	PDGF-BB
ACE-2	IGFBP-3	Leptin R	RANTES
Acrp30	IGF-I	LIF	Resistin
Adipsin	IGF-1 sR	Lymphotactin	Serum Amyloid A
AgRP	IL-1 R 4/ST2	MCP-1	SDF-1
Ang-2	IL-1 sRI	MCP-3	sTNF R II
Angiopoietin-1	IL-10	MSCF	sTNT RI
ANGPTL4	IL-11	MIF	TECK
CRP	IL-12	MIP-1beta	TGF-beta
ENA-78	IL-1 alpha	MSP a-chain	TIMP-1
Fas	IL-1 beta	OPG	TIMP-2
FGF-6	IL-6	OSM	TNF-alpha
Growth Hormone	IL-6 sR	PAI-I	VEGF
HCC-4	IL-8	PARC	XEDAR

Quantibody®

Adipokine Antibody Arrays: *Quantitative*

Quantibody®: Multiplex ELISA on a Glass Chip

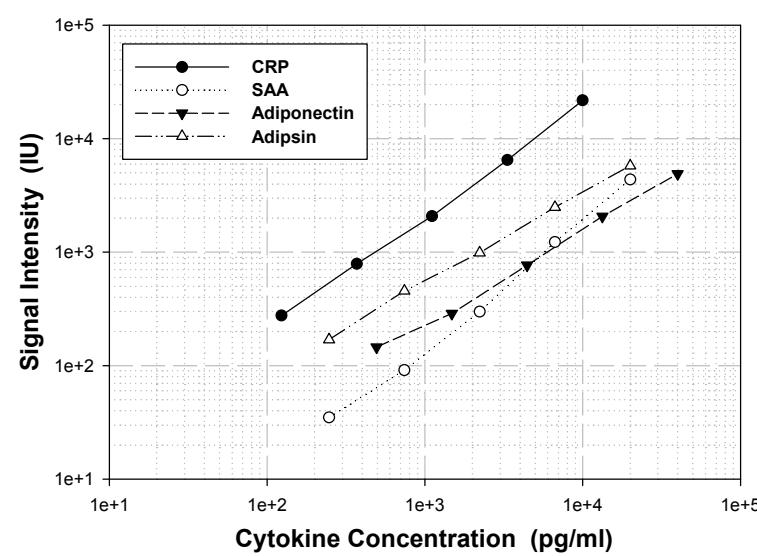
Combining the high specificity and sensitivity of sandwich ELISA with the high throughput of the array, Quantibody® can quantify up to 40 adipokines in a single aliquot. Predetermined adipokine standards, whose serial dilutions are processed alongside the unknown samples, are provided to generate a six-point standard curve for each adipokine.



Product Highlights

- High specificity and excellent reproducibility
- Requires as little as 10 µl sample
- Get results same day (~4 hour processing time)
- Hundreds of samples may be processed per day by a single technician
- Suitable for diverse sample types: body fluids, media, lysates, etc.

Product Performance	
Species	Human
Sample type	Serum, plasma, body fluids, media, lysates, etc.
Sample size	As little as 10 µl
Format	16 arrays per slide; quadruplicate data per analyte
Detection	Fluorescence (laser scanner)
Processing time	4 hours
Cross-reactivity	Negligible
Intra-assay CV	5-13%



Quantibody®

2

Quantibody® Arrays

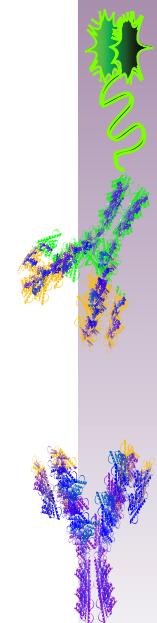
Product	Unit	Cat #	Description	Format	Sample types
Quantibody® Human Adipokine Array 1: IGF-I, IL-1beta, IL-6, IL-8, Insulin, Leptin, MCP-1, PAI-1, Resistin, TNFalpha	1 slide (16 arrays)	QAH-ADI-1-1	quantitative detection of 10 adipokines	Glass Chip	Any biological fluid (body fluids, lysates, cell culture supernates, etc.)
	2 slides (32 arrays)	QAH-ADI-1-2	quantitative detection of 10 adipokines	Glass Chip	Any biological fluid (body fluids, lysates, cell culture supernates, etc.)
	4 slides (64 arrays)	QAH-ADI-1-4	quantitative detection of 10 adipokines	Glass Chip	Any biological fluid (body fluids, lysates, cell culture supernates, etc.)
	Software	QAH-ADI-1-SW	Quantibody® Human Adipokine Array 1 software analysis tool		
Quantibody® Human Adipokine Array 2: Adipsin, Adiponectin, CRP, SAA	1 slide (16 arrays)	QAH-ADI-2-1	quantitative detection of 4 adipokines	Glass Chip	Any biological fluid (body fluids, lysates, cell culture supernates, etc.)
	2 slides (32 arrays)	QAH-ADI-2-2	quantitative detection of 4 adipokines	Glass Chip	Any biological fluid (body fluids, lysates, cell culture supernates, etc.)
	4 slides (64 arrays)	QAH-ADI-2-4	quantitative detection of 4 adipokines	Glass Chip	Any biological fluid (body fluids, lysates, cell culture supernates, etc.)
	Software	QAH-ADI-2-SW	Quantibody® Human Adipokine Array 2 software analysis tool		

Quantibody® Adipokine Array 1

	Curve range (pg/ml)	Sensitivity (pg/ml)	Serum recovery
IGF-I	247-20,000	9.3	87.4%
IL-1β	25-2,000	0.9	105.4%
IL-6	25-2,000	2.9	95.9%
IL-8	10-800	0.6	105.8%
Insulin	1,235-100,000	141.3	119.5%
Leptin	123-10,000	3.6	72.3%
MCP-1	25-2,000	1.1	103.2%
PAI-1	494-40,000	50.9	104.9%
Resistin	123-10,000	28.9	116.7%
TNFα	25-2,000	3.4	94.4%

Quantibody® Adipokine Array 2

	Curve Range (pg/ml)	Sensitivity (pg/ml)	Serum Recovery
CRP	123-10,000	12.6	104.8%
SAA	247-20,000	150.4	102.5%
Acrp30	494-40,000	213.2	97.9%
Adipsin	247-20,000	120.3	100.8%



RayBio® L-Series

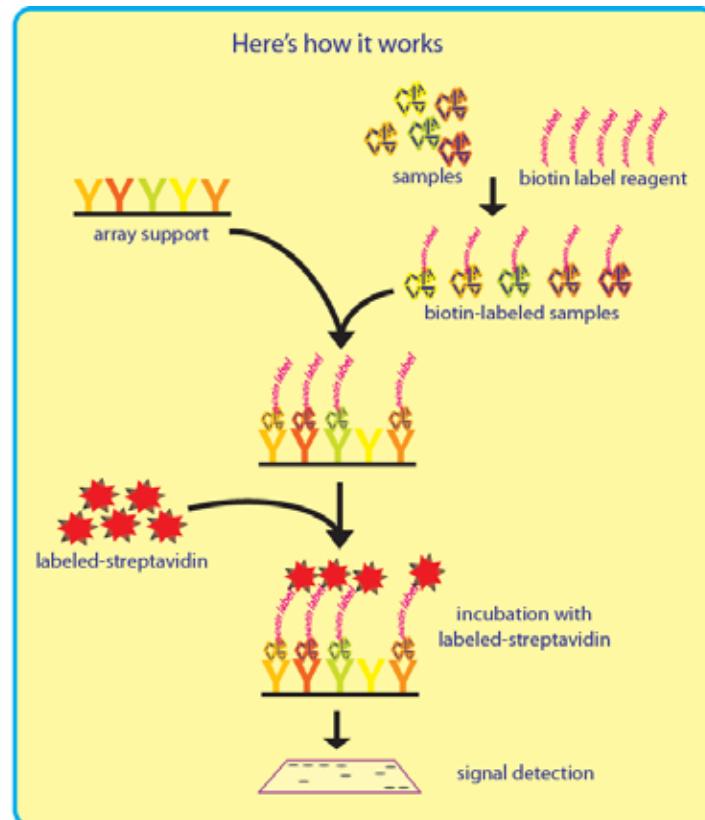
Adipokine Antibody Arrays

Biotin Label-based

Recent technological advances by RayBiotech have enabled the largest commercially available antibody array to date. With the L-Series Antibody Array, researchers can now obtain a broad, panoramic view of cytokine expression. The expression levels of 182 human adipokines can be simultaneously detected in cell culture supernates or serum. Furthermore, an internal control is used to monitor the whole process including biotin-labeling, so this high density array will accurately reflect the levels of adipokines in your sample.

Product Highlights

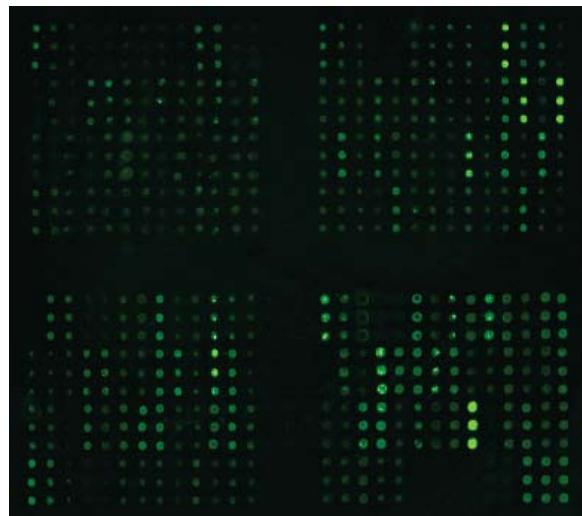
- High sensitivity: detects most proteins at pg levels
- Affordable enough for routine use
- High specificity
- May be used with diverse biological samples
- Customizable
- Requires as little as 80 µl serum or plasma



RayBio® L-Series

3

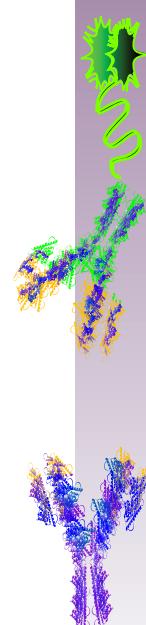
Representative Result

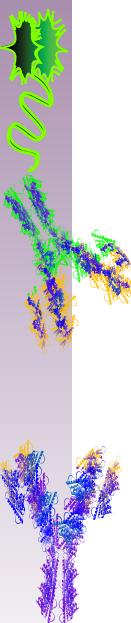


RayBio® Biotin-label-based Human Adipokine Antibody Array 1 probed with serum sample. The image was captured using a GenePix laser scanner (Axon Instruments).

Product list

Product	Cat #	Description	Size	Format	Sample type
RayBio® Biotin Label-Based Human Adipokine Antibody Array 1	AAH-BLG-ADI-1-2	For simultaneous detection of 182 human adipokine & obesity-related factors	1 glass chip with 2 subarrays for 2 samples	Glass chip	Serum and cell culture supernates
	AAH-BLG-ADI-1-4	For simultaneous detection of 182 human adipokine & obesity-related factors	1 glass chips with 4 subarrays for 4 samples	Glass chip	Serum and cell culture supernates
	AAH-BLM-ADI-1-2	For simultaneous detection of 182 human adipokine & obesity-related factors	2 membranes for 2 samples	Membrane	Cell culture supernates
	AAH-BLM-ADI-1-4	For simultaneous detection of 182 human adipokine & obesity-related factors	4 membranes for 4 samples	Membrane	Cell culture supernates
Analysis tool for Biotin Label-Based Human Adipokine array 1	AAH-BLG-ADI-1-SW	Software tool for analysis of data from Label-based Human Adipokine Antibody Array 1 - Glass chip			
	AAH-BLM-ADI-1-SW	Software tool for analysis of data from Label-based Human Adipokine Antibody Array 1 - Membrane			





RayBio® L-Series

Antibody list

RayBio® Label-based Adipokine Array

for simultaneous detection of 182 human adipokines

1	ACE / CD43	62	Ghrelin	123	Neurophilin-2
2	ACE-2	63	GITR	124	NGF R
3	ACTH	64	GITRL	125	NPY (Neuropeptide Y)
4	ADFP	65	GLP-1	126	Obestatin R (GPR-39)
5	Adiponectin / Acrp30	66	Glucagon	127	Orexin A
6	Adipsin (Factor D)	67	Glut1	128	Orexin B
7	AgRP	68	Glut2	129	OSM
8	AMPK-alpha-1	69	Glut3	130	Osteocalcin
9	Amylin	70	Glut5	131	Osteonectin
10	Angiopoietin-1	71	Glutathione peroxidase 1	132	Osteoprotegerin
11	Angiopoietin-2	72	Glutathione peroxidase 3	133	PARC
12	Angiotensinogen / Angiotensin II	73	GRO alpha	134	PDGF
13	Ang-like Factor	74	HCC4	135	PDGF-AA
14	ANGPTL1	75	HGF	136	PDGF-AB
15	ANGPTL2	76	HSD-1	137	PDGF-C
16	ANGPTL3	77	ICAM1	138	PDGF-D
17	ANGPTL4	78	IFN gamma	139	PEDF
18	Apelin Receptor	79	IGF-1	140	Pentraxin-3
19	ApoB	80	IGF-1 sR	141	PPARg2 / NRIC3
20	ApoE	81	IGFBP-1	142	Pref-1
21	AxI	82	IGFBP-2	143	Prohibitin
22	BDNF	83	IGFBP-3	144	Prolactin
23	bFGF	84	IGF-II	145	PYY
24	BMP-2	85	IL-1 R1	146	RANTES
25	BMP-3	86	IL-1 R4	147	RBP4
26	BMP-3beta / GDF-10	87	IL-1 alpha	148	RELM beta
27	BMP-4	88	IL-1 beta	149	Resistin
28	BMP-5	89	IL-1ra	150	S100
29	BMP-6	90	IL-6	151	S100 A8+A9
30	BMP-7	91	IL-6 sR	152	S100 A10
31	BMP-8	92	IL-8	153	SAA
32	BMP-15	93	IL-10	154	SDF-1
33	BMPR-IA / ALK-3	94	IL-11	155	SEMA3A
34	BMPR-IB / ALK-6	95	IL-12	156	Serotonin
35	BMPR-II	96	IL-25 / IL-17E	157	Syndecan-3
36	b-NGF	97	INSL3	158	TACE
37	C3a des Arg	98	INSRR	159	TDAG51
38	CART	99	Insulin	160	TECK
39	CD137 (4-1BB)	100	Insulin R (CD220)	161	TGF-alpha
40	CD36	101	Leptin	162	TGF-beta
41	Clusterin	102	Leptin R	163	Thrombospondin 1
42	CNTF	103	LH (Luteinizing Hormone)	164	Thrombospondin 2
43	C-peptide	104	LIF	165	Thrombospondin 4
44	CRP	105	LOX	166	TIMP-1
45	Cystatin C	106	Lymphotactin	167	TIMP-2
46	Dtk	107	MCP-1	168	TIMP-3
47	EGF	108	MCP-3	169	TIMP-4
48	EGF-R	109	M-CSF	170	Tissue factor (CD142)
49	ENA-78	110	MIF	171	TLR2
50	Endorphin Beta	111	MIP-1 alpha	172	TLR4
51	Epiregulin	112	MIP-1 beta	173	TNF alpha
52	E-selectin	113	MIP-3 beta	174	TNF sRI
53	ET-1 (Endothelin)	114	MMP-2	175	TNF sRII
54	FABP4	115	MMP-9	176	TSG-6
55	FAM3B	116	MMP-11	177	TSH
56	FAS / Apo-1	117	MMP-19	178	Vaspin
57	FGF-10	118	MSH-alpha	179	VCAM1
58	FGF-6	119	MSP-alpha	180	VEGF
59	FSH	120	Myostatin	181	Visfatin/PBEF1
60	Galectin -1	121	NAIP	182	XEDAR
61	GH (Growth Hormone)	122	NeuroD1		

RayBio® ELISA kits

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ELISA

ELISA Kits

RayBio ELISA (Enzyme-Linked Immunosorbent Assay) kits offer a fast, sensitive, and economical method to quantify human, mouse, and rat protein levels in serum, plasma, cell culture supernates, lysates, and urine. This assay employs a specific capture antibody coated on a 96-well plate. The target protein is sandwiched between a capture antibody and a biotinylated antibody. Signal is developed by streptavidin-HRP and a colorimetric substrate.

Product Highlights

- Best product for confirmation of antibody array data
- High specificity and sensitivity
- Complete kit with pre-coated 96-well plate
- Cost-effective
- Hundreds of choices

S = serum P = plasma M = conditioned medium U = urine C = cell lysate T = tissue lysate

Factor	Species	Cat #	Size	Sensitivity (pg/ml)	Sample type
Adiponectin/Acrp30	Human	ELH-Adiponectin-001	96 well strip plate	10	S, P, M, U
ANG	Human	ELH-ANG-001	96 well strip plate	1.5	S, P, M, U
Angiopoietin-1	Human	ELH-Angiopoietin1-001	96 well strip plate	30	S, P, M, U
Angiostatin	Human	ELH-Angiostatin-001	96 well strip plate	20,000	S, P, M, U
Axl	Human	ELH-AXL-001	96 well strip plate	6	S, P, M, U
CNTF	Human	ELH-CNTF-001	96 well strip plate	200	S, P, M, U
bFGF	Human	ELH-bFGF-001	96 well strip plate	50	S, P, M, U
bFGF	Human	ELH-bFGF-001C	96 well strip plate	50	C, T
BLC	Human	ELH-BLC-001	96 well strip plate	1.5	S, P, M, U
BDNF	Human	ELH-BDNF-001	96 well strip plate	3	S, P, M, U
BMP-4	Human	ELH-BMP4-001	96 well strip plate	15	S, P, M, U
BMP-4	Human	ELH-BMP4-001C	96 well strip plate	15	C, T
BMP-6	Human	ELH-BMP6-001	96 well strip plate	80	S, P, M, U
BMP-7	Human	ELH-BMP7-001	96 well strip plate	10	S, P, M, U
CD40L	Human	ELH-CD40L-001	96 well strip plate	6	S, P, M, U
CNTF	Human	ELH-CNTF-001	96 well strip plate	20	S, P, M, U
EGF	Human	ELH-EGF-001	96 well strip plate	1	S, P, M, U
EGFR	Human	ELH-EGFR-001	96 well strip plate	4	S, P, M, U
ENA-78	Human	ELH-ENA78-001	96 well strip plate	10	S, P, M, U
E-Selectin	Human	ELH-Eselectin-001	96 well strip plate	30	S, P, M, U
Eotaxin-2	Human	ELH-Eotaxin2-001	96 well strip plate	2	S, P, M, U
Fas	Human	ELH-Fas-001	96 well strip plate	5	S, P, M, U
Fas	Human	ELH-Fas-001C	96 well strip plate	5	C, T
FGF-4	Human	ELH-FGF4-001	96 well strip plate	50	S, P, M, U
FGF-4	Human	ELH-FGF4-001C	96 well strip plate	20	C, T
FGF-6	Human	ELH-FGF6-001	96 well strip plate	6	S, P, M, U

RayBio® ELISA kits

S = serum P = plasma M = conditioned medium U = urine C = cell lysate T = tissue lysate

Factor	Species	Cat #	Size	Sensitivity (pg/ml)	Sample type
FGF-9	Human	ELH-FGF9-001	96 well strip plate	200	S, P, M, U
Flt-3L	Human	ELH-FLT3L-001	96 well strip plate	1.5	S, P, M, U
Fractalkine	Human	ELH-Fractalkine-001	96 well strip plate	300	S, P, M, U
G-CSF	Human	ELH-GCSF-001	96 well strip plate	20	S, P, M, U
Growth Hormone	Human	ELH-GH-001	96 well strip plate	4	S, P, M, U
GITR	Human	ELH-GITR-001	96 well strip plate	15	S, P, M, U
GITR	Human	ELH-GITR-001C	96 well strip plate	15	C, T
HCC-4	Human	ELH-HCC4-001	96 well strip plate	8	S, P, M, U
HGF	Human	ELH-HGF-001	96 well strip plate	8	S, P, M, U
HGF	Human	ELH-HGF-001C	96 well strip plate	8	C, T
IFN-gamma	Human	ELH-IFNgamma-001	96 well strip plate	15	S, P, M, U
IFN-gamma	Human	ELH-IFNgamma-001C	96 well strip plate	15	C, T
IGF-BP-1	Human	ELH-IGFBP1-001	96 well strip plate	5	S, P, M, U
IGF-BP-2	Human	ELH-IGFBP2-001	96 well strip plate	20	S, P, M, U
IGF-BP-3	Human	ELH-IGFBP3-001	96 well strip plate	80	S, P, M, U
IGF-BP-4	Human	ELH-IGFBP4-001	96 well strip plate	250	S, P, M, U
IGF-BP-6	Human	ELH-IGFBP6-001	96 well strip plate	150	S, P, M, U
IGF-I	Human	ELH-IGFI-001	96 well strip plate	45	S, P, M, U
IL-1alpha	Human	ELH-IL1alpha-001	96 well strip plate	2	S, P, M, U
IL-1alpha	Human	ELH-IL1alpha-001C	96 well strip plate	2	C, T
IL-1 beta	Human	ELH-IL1beta-001	96 well strip plate	0.3	S, P, M, U
IL-1ra	Human	ELH-IL1ra-001	96 well strip plate	100	S, P, M, U
IL-1ra	Human	ELH-IL1ra-001C	96 well strip plate	100	C, T
IL-2	Human	ELH-IL2-001	96 well strip plate	4	S, P, M, U
IL-4	Human	ELH-IL4-001	96 well strip plate	5	S, P, M, U
IL-5	Human	ELH-IL5-001	96 well strip plate	5	S, P, M, U
IL-6	Human	ELH-IL6-001	96 well strip plate	6	S, P, M, U
IL-6	Human	ELH-IL6-001C	96 well strip plate	6	C, T
IL-7	Human	ELH-IL7-001	96 well strip plate	5	S, P, M, U
IL-8	Human	ELH-IL8-001	96 well strip plate	1	S, P, M, U
IL-8	Human	ELH-IL8-001C	96 well strip plate	1	C, T
IL-10	Human	ELH-IL10-001	96 well strip plate	1	S, P, M, U
IL-11	Human	ELH-IL11-001	96 well strip plate	3	S, P, M, U
IL-12P70	Human	ELH-IL12P70-001	96 well strip plate	15	S, P, M, U
IL-13	Human	ELH-IL13-001	96 well strip plate	0.15	S, P, M, U
IL-15	Human	ELH-IL15-001	96 well strip plate	3	S, P, M, U
IL-17	Human	ELH-IL17-001	96 well strip plate	10	S, P, M, U
IP-10	Human	ELH-IP10-001	96 well strip plate	8	S, P, M, U
I-TAC/CXCL11	Human	ELH-I-TAC-001	96 well strip plate	2	S, P, M, U
Leptin	Human	ELH-Leptin-001	96 well strip plate	6	S, P, M, U
LIF	Human	ELH-LIF-001	96 well strip plate	15	S, P, M, U
Light	Human	ELH-Light-001	96 well strip plate	15	S, P, M, U
MCP-1	Human	ELH-MCP1-001	96 well strip plate	2	S, P, M, U
MCP-2	Human	ELH-MCP2-001	96 well strip plate	1.5	S, P, M, U
MCSF	Human	ELH-MCSF-001	96 well strip plate	5	S, P, M, U
MDC	Human	ELH-MDC-001	96 well strip plate	2	S, P, M, U
MIF	Human	ELH-MIF-001	96 well strip plate	6	S, P, M, U
MIG	Human	ELH-MIG-001	96 well strip plate	20	S, P, M, U
MIP-1-alpha	Human	ELH-MIP1alpha-001	96 well strip plate	6	S, P, M, U
MIP-1-beta	Human	ELH-MIP1beta-001	96 well strip plate	2.5	S, P, M, U
MIP-1-delta	Human	ELH-MIP1delta-001	96 well strip plate	3	S, P, M, U
MIP-3-alpha	Human	ELH-MIP3alpha-001	96 well strip plate	1.5	S, P, M, U
MIP-3-alpha	Human	ELH-MIP3alpha-001C	96 well strip plate	3	C, T

RayBio® ELISA kits

S = serum P = plasma M = conditioned medium U = urine C = cell lysate T = tissue lysate

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ELISA

Factor	Species	Catalog #	Size	Sensitivity (pg/ml)	Sample type
MMP-1	Human	ELH-MMP1-001	96 well strip plate	8	S, P, M, U
MMP-1	Human	ELH-MMP1-001C	96 well strip plate	8	C, T
MMP-3	Human	ELH-MMP3-001	96 well strip plate	300	S, P, M, U
MMP-8	Human	ELH-MMP8-001	96 well strip plate	6	S, P, M, U
MMP-9	Human	ELH-MMP9-001	96 well strip plate	10	S, P, M, U
MMP-10	Human	ELH-MMP10-001	96 well strip plate	1.5	S, P, M, U
MMP-13	Human	ELH-MMP13-001	96 well strip plate	6	S, P, M, U
MPIF-1	Human	ELH-MPIF1-001	96 well strip plate	7	S, P, M, U
MSP	Human	ELH-MSP-001	96 well strip plate	8	S, P, M, U
NAP-2	Human	ELH-NAP2-001	96 well strip plate	8.5	S, P, M, U
NT-3	Human	ELH-NT3-001	96 well strip plate	4	S, P, M, U
NT-4	Human	ELH-NT4-001	96 well strip plate	2	S, P, M, U
Osteoprotegerin	Human	ELH-OPG-001	96 well strip plate	1	S, P, M, U
PARC	Human	ELH-PARC-001	96 well strip plate	2	S, P, M, U
PDGF-BB	Human	ELH-PDGFB-001	96 well strip plate	2	S, P, M, U
PDGF-BB	Human	ELH-PDGFB-001C	96 well strip plate	2	C, T
RANTES	Human	ELH-RANTES-001	96 well strip plate	3	S, P, M, U
Resistin	Human	ELH-Resistin-001	96 well strip plate	2	S, P, M, U
SCF	Human	ELH-SCF-001	96 well strip plate	2	S, P, M, U
SDF-1alpha	Human	ELH-SDF1alpha-001	96 well strip plate	3	S, P, M, U
sICAM-1	Human	ELH-sICAM1-001	96 well strip plate	15	S, P, M, U
sICAM-1	Human	ELH-sICAM1-001C	96 well strip plate	15	C, T
sgp-130	Human	ELH-sgp130-001	96 well strip plate	4	S, P, M, U
sTNF-RII	Human	ELH-sTNFRII-001	96 well strip plate	5	S, P, M, U
TARC	Human	ELH-TARC-001	96 well strip plate	5	S, P, M, U
TIMP-1	Human	ELH-TIMP1-001	96 well strip plate	40	S, P, M, U
TIMP-2	Human	ELH-TIMP2-001	96 well strip plate	10	S, P, M, U
TGFalpha	Human	ELH-TGFalpha-001	96 well strip plate	3	S, P, M, U
TGF-beta-1	Human	ELH-TGFbeta1-001	96 well strip plate	80	S, P, M, U
TGF-beta-2	Human	ELH-TGFbeta2-001	96 well strip plate	15	S, P, M, U
TNF-alpha	Human	ELH-TNFalpha-001	96 well strip plate	15	S, P, M, U
TNF-beta	Human	ELH-TNFbeta-001	96 well strip plate	6	S, P, M, U
TPO	Human	ELH-TPO-001	96 well strip plate	25	S, P, M, U
VCAM-1	Human	ELH-VCAM1-001	96 well strip plate	300	S, P, M, U
VEGF	Human	ELH-VEGF-001	96 well strip plate	20	S, P, M, U
VEGF	Human	ELH-VEGF-001C	96 well strip plate	20	S, P, M, U
VEGF R2	Human	ELH-VEGFR2-001	96 well strip plate	70	S, P, M, U
Axl	Mouse	ELM-AXL-001	96 well strip plate	3	S, P, M
BLC	Mouse	ELM-BLC-001	96 well strip plate	2	S, P, M
CD30L/TNFSF8	Mouse	ELM-CD30L-001	96 well strip plate	3	S, P, M
6Ckine	Mouse	ELM-6Ckine-001	96 well strip plate	20	S, P, M
CTACK	Mouse	ELM-CTACK-001	96 well strip plate	15	S, P, M
CXCL-16	Mouse	ELM-CXCL16-001	96 well strip plate	1.3	S, P, M
CRG-2	Mouse	ELM-CRG2-001	96 well strip plate	15	S, P, M
Eotaxin	Mouse	ELM-Eotaxin-001	96 well strip plate	1	S, P, M
G-CSF	Mouse	ELM-GCSF-001	96 well strip plate	0.5	S, P, M
GM-CSF	Mouse	ELM-GMCSF-001	96 well strip plate	6	S, P, M
IFN-gamma	Mouse	ELM-IFNgamma-001	96 well strip plate	10	S, P, M
IFN-gamma	Mouse	ELM-IFNgamma-001C	96 well strip plate	10	C, T
IGF-BP-6	Mouse	ELM-IGFBP6-001	96 well strip plate	6	S, P, M
IL-1-beta	Mouse	ELM-IL1beta-001	96 well strip plate	5	S, P, M
IL-1-beta	Mouse	ELM-IL1beta-001C	96 well strip plate	5	C, T
IL-2	Mouse	ELM-IL2-001	96 well strip plate	1	S, P, M
IL-4	Mouse	ELM-IL4-001	96 well strip plate	0.6	S, P, M
IL-4	Mouse	ELM-IL4-001C	96 well strip plate	1	C, T

RayBio® ELISA kits

S = serum P = plasma M = conditioned medium U = urine C = cell lysate T = tissue lysate

Factor	Species	Catalog #	Size	Sensitivity (pg/ml)	Sample type
IL-5	Mouse	ELM-IL5-001	96 well strip plate	1	S, P, M
IL-6	Mouse	ELM-IL6-001	96 well strip plate	2	S, P, M
IL-6	Mouse	ELM-IL6-001C	96 well strip plate	2	C, T
IL-7	Mouse	ELM-IL7-001	96 well strip plate	10	S, P, M
IL-9	Mouse	ELM-IL9-001	96 well strip plate	100	S, P, M
IL-12 (P40/70)	Mouse	ELM-IL12P40/70-001	96 well strip plate	10	S, P, M
IL-13	Mouse	ELM-IL13-001	96 well strip plate	6	S, P, M
IL-17	Mouse	ELM-IL17-001	96 well strip plate	6	S, P, M
Leptin	Mouse	ELM-Leptin-001	96 well strip plate	1.5	S, P, M
MCP-1	Mouse	ELM-MCP1-001	96 well strip plate	3	S, P, M
MCP-1	Mouse	ELM-MCP1-001C	96 well strip plate	8	C, T
MCP-5	Mouse	ELM-MCP5-001	96 well strip plate	0.5	S, P, M
MIP-1alpha	Mouse	ELM-MIP1alpha-001	96 well strip plate	8	S, P, M
MIP-2	Mouse	ELM-MIP2-001	96 well strip plate	10	S, P, M
P-selectin	Mouse	ELM-Pselectin	96 well strip plate	8	S, P, M
SCF	Mouse	ELM-SCF-001	96 well strip plate	5	S, P, M
SDF-1-alpha	Mouse	ELM-SDF1alpha-001	96 well strip plate	3	S, P, M
TECK	Mouse	ELM-TECK-001	96 well strip plate	15	S, P, M
TIMP-1	Mouse	ELM-TIMP1-001	96 well strip plate	3	S, P, M
TIMP-1	Mouse	ELM-TIMP1-001C	96 well strip plate	2	C, T
TIMP-2	Mouse	ELM-TIMP2-001	96 well strip plate	80	S, P, M
TNF-alpha	Mouse	ELM-TNFAalpha-001	96 well strip plate	50	S, P, M
TPO	Mouse	ELM-TPO-001	96 well strip plate	6	S, P, M
VCAM-1	Mouse	ELM-VCAM1-001	96 well strip plate	1.5	S, P, M
VEGF	Mouse	ELM-VEGF-001	96 well strip plate	2	S, P, M
VEGF	Mouse	ELM-VEGF-001C	96 well strip plate	2	C, T
CTNF	Rat	ELR-CTNF-001	96 well strip plate	10	S, P, M
Fractalkine	Rat	ELR-Fractalkine-001	96 well strip plate	5	S, P, M
Fractalkine	Rat	ELR-Fractalkine-001C	96 well strip plate	5	C, T
IL-4	Rat	ELR-IL4-001	96 well strip plate	1.5	S, P, M
IL-10	Rat	ELR-IL10-001	96 well strip plate	25	S, P, M
Lix	Rat	ELR-LIX-001	96 well strip plate	20	S, P, M
Lix	Rat	ELR-LIX-001C	96 well strip plate	15	C, T
MCP-1	Rat	ELR-MCP1-001	96 well strip plate	15	S, P, M
MCP-1	Rat	ELR-MCP1-001C	96 well strip plate	15	C, T
TIMP-1	Rat	ELR-TIMP1-001	96 well strip plate	15	S, P, M
TIMP-1	Rat	ELR-TIMP1-001C	96 well strip plate	15	C, T
TNF-alpha	Rat	ELR-TNFAalpha-001	96 well strip plate	25	S, P, M
VEGF	Rat	ELR-VEGF-001	96 well strip plate	2	S, P, M
VEGF	Rat	ELR-VEGF-001C	96 well strip plate	2	C, T



RayBio® EIA kits

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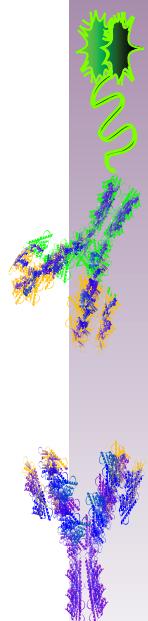
EIA

Enzyme Immunoassay (EIA)

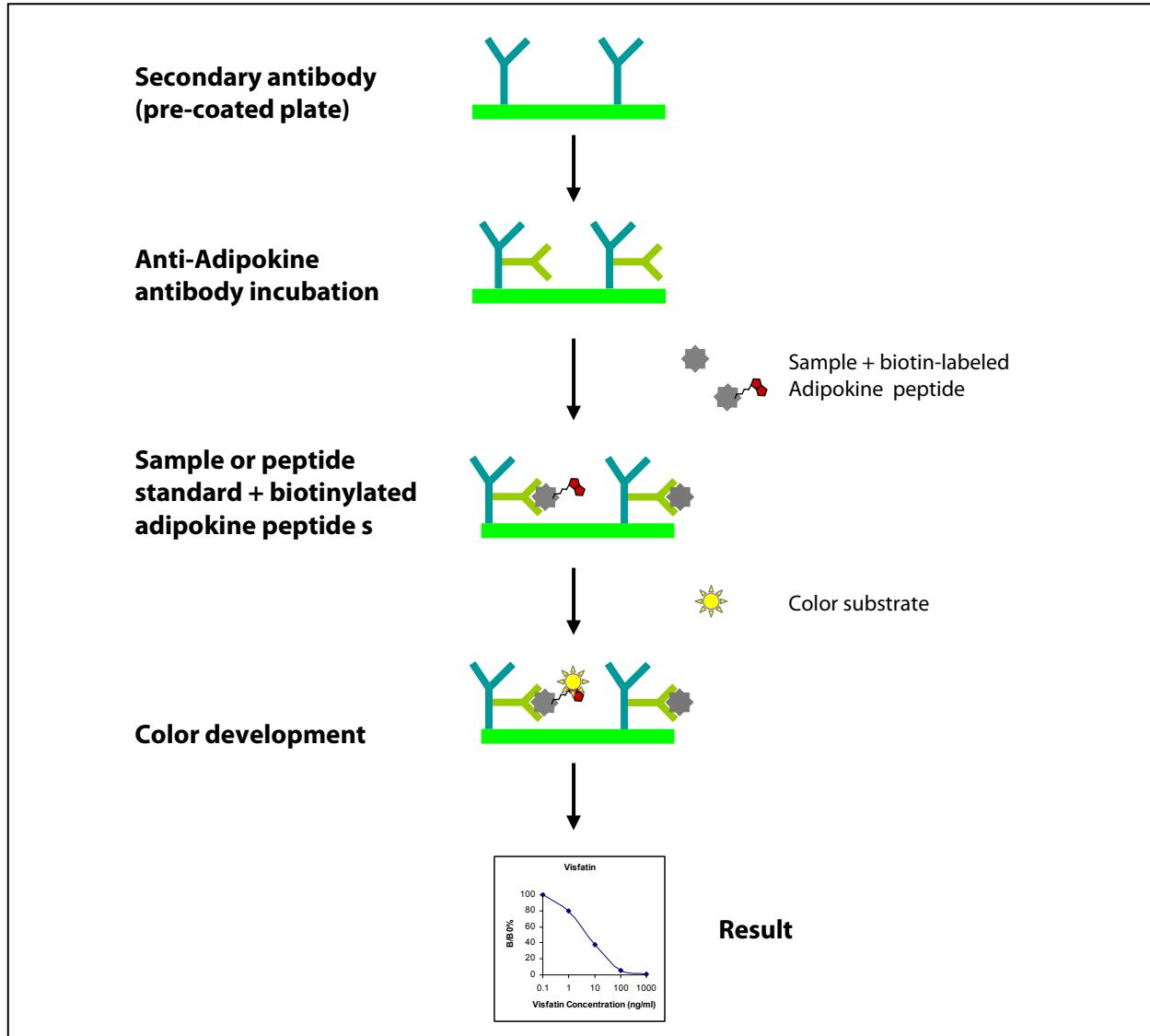
The RayBio® Enzyme ImmunoAssay (EIA) is an in vitro quantitative assay for detecting Adipokine peptides based on the principle of competitive enzyme immunoassay. The microplate in the kit is pre-coated with adipokine-specific antibody. After a blocking step, the antibody is competitively bound by a mixture of biotinylated adipokine peptide and peptide standard or targeted peptide in samples. The biotinylated peptide then interacts with HRP-Streptavidin, which produces a colorimetric signal. The signal intensity is directly proportional to the amount of biotinylated peptide-SA-HRP and inversely proportional to the adipokine in the standard or samples. A standard curve of adipokine peptide can then be established and the concentration of adipokine in the samples can be calculated accordingly.

Product Highlights

- High specificity and reproducibility
- Adipokines detected at 100 pg levels
- Easy to perform; rapid results
- Diverse biological samples
- Low sample volume required
- No specialized instrumentation required
- Unique targets; no other assays available



How it works



Factor	Species	Cat #	Size	Sensitivity	Sample type
Visfatin	Human, mouse, rat	EIH-VIS-1	96-well plate	379 pg/ml	Serum, cell lysate, cell culture supernatant
Ghrelin	Human, mouse	EIH-GHR-1	96-well plate	161 pg/ml	Serum, cell lysate, cell culture supernatant
Nesfatin	Human, mouse, rat	EIH-NES-1	96-well plate	147 pg/ml	Serum, cell lysate, cell culture supernatant
Apelin	Human, mouse, rat	EIH-APC-1	96-well plate	142 pg/ml	Serum, cell lysate, cell culture supernatant
Angiotensin II	Human, mouse, rat	EIH-AGII-1	96-well plate	2.62 ng/ml	Serum, cell lysate, cell culture supernatant
Neuropeptide Y	Human, mouse, rat	EIH-NPY-1	96-well plate	180 pg/ml	Serum, cell lysate, cell culture supernatant
EIA positive control	Human	EIH-POS-01C	100ul/vial		Cell line

RayBio® Antibodies (Adipokine & Obesity Related)

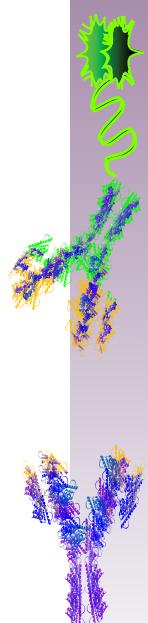
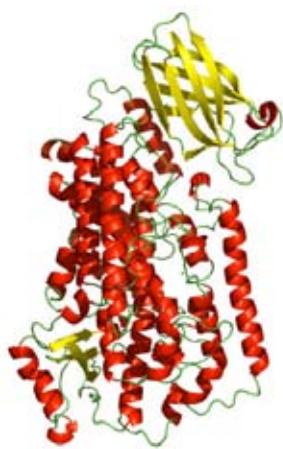
Product	Species	Description	Catalog No.	Size
Acrp30	Human	Rabbit anti Adiponectin, N-terminal	MD-08-0001	100ug
Acrp30	Human	rabbit anti-human Acrp30	RB-08-0021	200μg
Acrp30	Human	rabbit anti-human Acrp30	RB-08-0021A	1mg(10 Vials)
ACTH	Human	Rabbit Anti Human ACTH, With HRP-conjugated secondary antibody	DS-PB-00060	500ul
ACTH	Human	Rabbit Anti ACTH, With HRP-conjugated secondary antibody	DS-PB-00061	1ml
ACTH	Human	Rabbit Anti Human ACTH, With HRP-conjugated secondary antibody	DS-PB-00062	6ml
ACTH	Human	Rabbit Anti Human ACTH, With HRP-conjugated secondary antibody	DS-PB-00063	1ml
ACTH	Human	Mouse anti ACTH C-terminal	MD-08-0002	1mg
Adipocytes Membrane	Pig	Sheep Anti Porcine Adipocytes Membrane, With HRP-conjugated secondary antibody	DS-PB-00078	1ml
Adiponectin	Human	Mouse anti Adiponectin	MD-08-0003	1mg
Adiponectin (C-terminal)		Rabbit Anti Adiponectin (C-terminal), With HRP-conjugated secondary antibody	DS-PB-00079	0.1mg
Adipsin	Human	rabbit anti-human Adipsin	RB-08-0017	200μg
Adipsin	Human	rabbit anti-human Adipsin	RB-08-0017A	1mg(10 Vials)
Amylin	Human	rabbit anti-Amylin	RB-08-0007	200μg
Angiotensin I	Human	Sheep Anti Human Angiotensin I, With HRP-conjugated secondary antibody	DS-PB-00169	250ul
Angiotensin II	Human	Mouse Anti Human Angiotensin II, With HRP-conjugated secondary antibody	DS-MB-00081	200μg
Angiotensin II	Human	Mouse Anti Human Angiotensin II, With HRP-conjugated secondary antibody	DS-MB-00082	200μg
Angiotensin II	Human	Rabbit Anti Human Angiotensin II, With HRP-conjugated secondary antibody	DS-PB-00170	1ml
Angiotensin II	Human	rabbit anti-human Angiotensin II	RB-08-0018	200μg
Angiotensin II	Human	rabbit anti-human Angiotensin II	RB-08-0018A	1mg(10 Vials)
Angiotensin II Type 1 Receptor	Human	Sheep Anti Human Angiotensin II Type 1 Receptor, With HRP-conjugated secondary antibody	DS-PB-00171	200μg
Angiotensin III	Human	Rabbit Anti Human Angiotensin III, With HRP-conjugated secondary antibody	DS-PB-00172	1ml
APL	Human	rabbit anti-human Apelin (N-terminus)	RB-08-0004	200μg
APL	Human	rabbit anti-human Apelin (N-terminus)	RB-08-0004A	1mg(10 Vials)
APL	Human	rabbit anti-human Apelin (C-terminus)	RB-08-0005	200μg
APL	Human	rabbit anti-human Apelin (C-terminus)	RB-08-0005A	1mg(10 Vials)
CART	Human, Mouse, Rat	Rabbit anti-CART	RB-08-0012	200μg
CART	Human, Mouse, Rat	Rabbit anti-CART	RB-08-0012A	1mg(10 Vials)
CD106	Human	Mouse Anti Human CD106, With HRP-conjugated secondary antibody	DS-MB-00256	0.2mg
CNTF	Human	Rabbit Anti Human CNTF:Biotin, With HRP-Streptavidin	DS-PB-02111	50 ug
Collagen IV	Human	Rabbit anti Human Collagen IV	MD-22-0010	0.5ml
Collagen VI	Human	Rabbit anti Collagen Type VI	MD-22-0017	0.5mg
CRP	Human	Mouse anti C-Reactive Protein	MD-14-0190	1mg
CRP	Human	Chicken anti C Reactive Protein (CRP)	MD-14-0191	1mg
CRP	Human	Goat anti C Reactive Protein (CRP)	MD-14-0192	10ml
CRP	Human	Goat anti Human C Reactive Protein (CRP)	MD-14-0193	10ml
CTRP3	Human	Rabbit anti C1q Tumor necrosis factor alpha Related Protein 3 (CTRP3)	MD-14-0198	100ug
CTRP4	Human	Rabbit anti C1q Tumor necrosis factor alpha Related Protein 4 (CTRP4), C-terminal	MD-14-0199	100ug
FGF Basic/bFGF	Human	Mouse anti-Basic fibroblast growth factor	RB-01-0001	200μg
FGF Basic/bFGF	Human	Mouse anti-Basic fibroblast growth factor	RB-01-0001A	1mg(10 Vials)
GH	Human	Mouse Anti Human Growth Hormone	IP-13-197	500μg, 1 mg
Ghrelin	Human	Mouse anti Ghrelin	MD-08-0004	0.5mg
Ghrelin	Human	Rabbit anti-Ghrelin (middle)	RB-08-0001	200μg
Ghrelin	Human	Rabbit anti-Ghrelin (middle)	RB-08-0001A	1mg(10 Vials)
Ghrelin	Human	Rabbit anti-Ghrelin (active)	RB-08-0010	200μg
Ghrelin	Human	Rabbit anti-Ghrelin (active)	RB-08-0010A	1mg(10 Vials)
GHRH	Human	Sheep Anti Human Growth Hormone Reseasing Hormone	DS-PB-02112	1ml
GIP	Pig	Rabbit Anti Pig Gastrin Inhibitory Peptide	DS-PB-02113	250 tests
GLP1	Human	Mouse anti Glucagon-Like Peptide 1	MD-14-0329	10ug
GLP2	Human	Rabbit anti Glucagon-Like Peptide 2	MD-14-0330	20ul
glucagon	Human	rabbit anti-human glucagon (C-terminus)	RB-08-0019	200μg
glucagon	Human	rabbit anti-human glucagon (C-terminus)	RB-08-0019A	1mg(10 Vials)
glucagon	Human	rabbit anti-human glucagon (N-terminus)	RB-08-0020	200μg
glucagon	Human	rabbit anti-human glucagon (N-terminus)	RB-08-0020A	1mg(10 Vials)
GRO alpha	Human	Rabbit anti-Growth Related Oncogene-Alpha	RB-01-0002	200μg
GRO alpha	Human	Rabbit anti-Growth Related Oncogene-Alpha	RB-01-0002A	1mg(10 Vials)

RayBio® Antibodies (Adipokine & Obesity Related)

Product	Species	Description	Catalog No.	Size
IFN-gamma	Human	Rabbit Anti-human interferon gamma	RB-01-0003	200µg
IFN-gamma	Human	Rabbit Anti-human interferon gamma	RB-01-0003A	1mg(10 Vials)
IGFBP-1	Human	Sheep Anti Human Insulin-Like Growth Factor Binding Protein 1, With HRP-conjugated secondary antibody	DS-PB-01049	1ml
IL-1 beta	Human	Mouse Anti-Human IL-1 beta	RB-IP-01-101	500µg
IL-1 beta	Human	Mouse Anti-Human IL-1 beta	RB-IP-01-101	1mg(10 Vials)
IL-10	Human	Mouse Anti-Human IL-10	RB-IP-01-112	500µg
IL-10	Human	Mouse Anti-Human IL-10	RB-IP-01-112	1mg(10 Vials)
IL-6	Human	Mouse Anti-Human IL-6	IP-01-109	500µg
IL-8	Human	Mouse Anti-Human IL-8	RB-IP-01-111	500µg
IL-8	Human	Mouse Anti-Human IL-8	RB-IP-01-111	1mg(10 Vials)
Insulin R	Human	mouse anti-Insulin Receptor	DB-08-0004	50 µg
Insulin Receptor, beta	Human	Rabbit anti Insulin Rec. beta	MD-08-0005	100ug
Leptin	Human	Mouse Anti Human Leptin	IP-08-172	500µg
Leptin	Human	Mouse anti Leptin, carboxyl terminal (residues 131-145)	MD-08-0006	50ug
Leptin	Human	Mouse anti Leptin, carboxyl terminal (Residues 92-145) cyclized	MD-08-0007	100ul
Leptin	Rabbit	Rabbit anti Leptin , carboxyl terminal (residues 131-145)	MD-08-0008	100ul
Leptin	Mouse	Rabbit anti Mouse Leptin	MD-08-0009	100ug
LH	Human	Goat anti Luteinizing Hormone (LH) Intact	MD-13-0001	1ml
LH	Human	Mouse anti Luteinizing Hormone (LH)	MD-13-0002	1mg
Nesfatin	Human	rabbit anti-Nesfatin	RB-08-0008	200µg
Nesfatin	Human	rabbit anti-Nesfatin	RB-08-0008A	1mg(10 Vials)
NPY	Human, Mouse, Rat	Rabbit anti-Neuropeptide Y	RB-08-0016	200µg
NPY	Human, Mouse, Rat	Rabbit anti-Neuropeptide Y	RB-08-0016A	1mg(10 Vials)
Obestatin	Human	mouse anti-Obestatin	RB-08-0006	200µg
Obestatin	Human	mouse anti-Obestatin	RB-08-0006A	1mg(10 Vials)
Omentin	Human	rabbit anti-Omentin	RB-08-0009	200µg
Omentin	Human	rabbit anti-Omentin	RB-08-0009A	1mg(10 Vials)
POMC	Human, Mouse, Rat	Rabbit anti-POMC	RB-08-0013	200µg
POMC	Human, Mouse, Rat	Rabbit anti-POMC	RB-08-0013A	1mg(10 Vials)
Prolactin Receptor	Human	Sheep Anti Human Prolactin Receptor, With HRP-conjugated secondary antibody	DS-PB-01668	1ml
PYY	Human	Rabbit anti-Peptide YY	RB-08-0011	200 µg
RBp4	Human	Mouse Anti Human Retinol Binding Protein	DS-PB-02114	0.1mg
Relm alpha	Human, Mouse, Rat	Rabbit anti-Relm alpha	RB-08-0014	200µg
Relm alpha	Human, Mouse, Rat	Rabbit anti-Relm alpha	RB-08-0014A	1mg(10 Vials)
Relm beta	Human, Mouse, Rat	Rabbit anti-Relm beta	RB-08-0015	200µg
Relm beta	Human, Mouse, Rat	Rabbit anti-Relm beta	RB-08-0015A	1mg(10 Vials)
Resistin	Human	Rabbit anti Human Resistin (a.a. 30-49)	MD-14-0498	20ul
S-100	Mouse	Mouse anti S100	MD-19-0156	100ug
TIMP-2	Human	Sheep Anti Human TIMP-2 Loop 6, With HRP-conjugated secondary antibody	DS-PB-01964	1ml
TIMP-3	Human	Rabbit anti- tissue inhibitor of metalloproteinases-3	RB-15-0001	200µg
TNF alpha	Human	Mouse Anti-Tumor necrosis factor-alpha, (TNFSF2)	RB-01-0006	200µg
TNF alpha	Human	Mouse Anti-Tumor necrosis factor-alpha, (TNFSF2)	RB-01-0006A	1mg(10 Vials)
TSH	Human	Goat anti Human Thyroid Stimulating Hormone (TSH) beta	MD-13-0010	1mg
Vaspin	Human	Rabbit anti-Vaspin	RB-08-0002	200µg
Vaspin	Human	Rabbit anti-Vaspin	RB-08-0002A	1mg(10 Vials)
VEGF	Human	Mouse Anti-Endothelial Growth Factor	IP-09-125	500µg
Visfatin	Human	Rabbit anti-Visfatin	RB-08-0003	200µg
Visfatin	Human	Rabbit anti-Visfatin	RB-08-0003A	1mg(10 Vials)

RayBio® Proteins (Adipokine & Obesity Related)

Product	Species	Description	Catalog No.	Unit
Acp30	Mouse	Recombinant Mouse Adiponectin glycosylated, HEK cell line	IP-01-435P	2µg
Acp30	Human	Recombinant Human Adiponectin glycosylated, HEK cell line	IP-01-434P	2µg
Acp30	Human	Recombinant Human Adiponectin His	IP-01-433P	10µg
Acp30	Mouse	Recombinant Mouse Adiponectin	IP-01-432P	20µg
Acp30	Human	Recombinant Human Adiponectin	IP-01-280P	5µg
Acp30	Human	Recombinant Human Adiponectin Globular	IP-01-277P	2µg
Acp30	Mouse	Recombinant Mouse Adiponectin Trimeric Form	IP-01-247P	2µg
Acp30	Human	Recombinant Human Adiponectin Trimeric Form	IP-01-233P	2µg
ADFP	Human	Recombinant Human Adipose Differentiation-Related Protein	IP-03-405P	2µg
GHRL	Human	Recombinant ghrelin/obestatin preprohormone	RB-08-0001P	10, 25, 50, 100ug
Lectin		Lectin	IP-03-545P	2µg
Leptin	Chicken	Recombinant Chicken Leptin Binding Domain	IP-01-509P	10µg
Leptin	Human	Recombinant Human Leptin Binding Domain	IP-01-508P	10µg
Leptin	rabbit	Recombinant Rabbit Leptin	IP-01-507P	100µg
Leptin	dog	Recombinant Dog Leptin	IP-01-506P	100µg
Leptin	Chicken	Recombinant Chicken Leptin	IP-01-505P	100µg
Leptin	horse	Recombinant Horse Leptin	IP-01-504P	100µg
leptin	bovine	Recombinant Bovine Leptin	IP-01-502P	100µg
Leptin	Mouse	Recombinant Murine Leptin	IP-01-351P	200µg, 1mg, 5mg
Leptin	Ovine	Ovine Leptin	IP-01-239P	100, 200, 1000µg
Leptin	Human	Human Leptin	IP-01-228P	200µg, 1mg, 5mg
Leptin	Rat	Rat Leptin	IP-01-227P	200µg, 1mg, 5mg
Leptin-qA	Ovine	Recombinant Ovine Leptin Quadruple Antagonist	IP-01-357P	20, 100, 1000µg
Leptin-qA	Human	Recombinant Human Leptin Quadruple Antagonist	IP-01-353P	20, 100, 1000µg
Leptin-tA	Ovine	Recombinant Ovine Leptin Triple Antagonist	IP-01-356P	20, 100, 1000µg
Leptin-tA	Rat	Recombinant Rat Leptin Triple Antagonist	IP-01-355P	20, 100, 1000µg
Leptin-tA	Mouse	Recombinant Murine Leptin Triple Antagonist	IP-01-354P	20, 100, 1000µg
Leptin-tA	Human	Recombinant Human Leptin Triple Antagonist	IP-01-352P	20, 100, 1000µg
RBP4	Human	as Western blotting positive ctrl**	RB-08-0016-WBC	100ul
RBP4	Human	Recombinant retinol binding protein 4, plasma	RB-08-0016P	10, 50, 100, 500ug
Resistin	rat	Recombinant Rat Resistin	IP-01-458P	5µg
Resistin	Mouse	Recombinant Mouse Resistin	IP-01-457P	5µg
Resistin	Human	Recombinant Human Resistin	IP-01-456P	5µg
Visfatin	Mouse	Recombinant Mouse Visfatin	IP-08-447P	5, 25, 1000µg
Visfatin	Human	Recombinant Human Visfatin	IP-08-318P	5, 25, 1000µg
TSH	Human	Recombinant Human Thyroid Stimulating Hormone	IP-02-252P	10µg
TIMP3	Human	Metalloproteinases 3	RB-15-0001P	50ug





Peptides

RayBio® Peptides (Adipokine & Obesity Related)

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Peptides

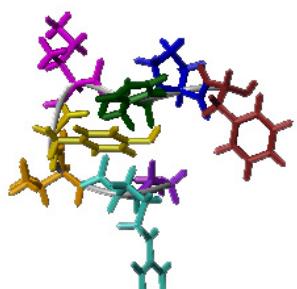
Product	Species	Description	Cat No.	Size
ACTH (1-10)	human	S-Y-S-M-E-H-F-R-W-G-OH	CG55359	5 mg
ACTH (1-13)	human	S-Y-S-M-E-H-F-R-W-G-K-P-V-OH	CG55399	2.5 mg
ACTH (1-16)	human	S-Y-S-M-E-H-F-R-W-G-K-P-V-G-K-K-OH	CG55156	2.5 mg
ACTH (1-17)	human	S-Y-S-M-E-H-F-R-W-G-K-P-V-G-K-K-OH	CG55159	2.5 mg
ACTH (1-24)	human	S-Y-S-M-E-H-F-R-W-G-K-P-V-G-K-K-R-P-V-K-V-Y-P-OH	CG55222	2.5 mg
ACTH (1-39)	rat	S-Y-S-M-E-H-F-R-W-G-K-P-V-G-K-K-R-R-P-V-K-V-Y-P-N-V-A-E-N-E-S-A-E-A-F-P-L-E-F-OH	CG55405	0.5, 1, 2.5 mg
ACTH (1-4)		S-Y-S-M-OH	CG55173	1 mg
ACTH (18-39)	human	R-P-V-K-V-Y-P-N-G-A-E-D-E-S-A-E-A-F-P-L-E-F-OH	CG55215	1, 2, 5 mg
ACTH (4-10)	human	M-E-H-F-R-W-G-OH	CG51725	5 mg
ACTH(1-39)	human	S-Y-S-M-E-H-F-R-W-G-K-P-V-G-K-K-R-R-P-V-K-V-Y-P-N-G-A-E-D-E-S-A-E-A-F-P-L-E-F-OH	CG52315	1 mg
Adipokinetic Hormone		pE-L-T-F-T-S-W-G-NH2	CG55334	5 mg
Adipokinetic Hormone	Schistocerca gregaria	pE-L-N-F-S-T-G-W-NH2	CG52218	5 mg
Adipokinetic Hormone	Locusta migratoria	pE-L-N-F-S-A-G-W-NH2	CG52217	5 mg
Amylin	human	K-C-N-T-A-T-C-A-T-Q-R-L-A-N-F-L-V-H-S-S-N-N-F-G-A-I-L-S-S-T-N-V-G-S-N-T-Y-NH2	CG52219	0.5, 1, 2.5 mg
Amylin (8-37)	human	A-T-Q-R-L-A-N-F-L-V-H-S-S-N-N-F-G-A-I-L-S-S-T-N-V-G-S-N-T-Y-OH	CG55204	0.5, 1, 2.5 mg
Amylin (8-37)	rat	A-T-Q-R-L-A-N-F-L-V-R-S-S-N-N-L-G-P-V-L-P-P-T-N-V-G-S-N-T-Y-NH2	CG55284	0.5, 1, 2.5 mg
Amylin (IAPP)	Feline	K-C-N-T-A-T-C-A-T-Q-R-L-A-N-F-L-I-R-S-S-N-N-L-G-A-I-L-S-P-T-N-V-G-S-N-T-Y-NH2 □ C2-C7 □	CG55201	0.5, 1, 2.5 mg
Angiotensin	Canine, Rat	D-R-V-Y-I-H-P-OH	CG55246	25 mg
Angiotensin I	human	D-R-V-Y-I-H-P-F-H-L-OH	CG52220	25 mg
Angiotensin I [Des-Asp1-]	human	R-V-Y-I-H-P-F-H-L-OH	CG55331	25 mg
Angiotensin II (1-4)	human	D-R-V-Y-OH	CG55177	25 mg
Angiotensin II (3-8)	human	V-Y-I-H-P-F-OH	CG55200	25 mg
Angiotensin II (4-8)	human	Y-I-H-P-F-OH	CG55193	25 mg
Angiotensin II [Sar1 Ile8]		Sar-R-V-Y-I-H-P-I-OH	CG55317	25 mg
Angiotensin II [Sar1]	human	Sar-R-V-Y-I-H-P-F-OH	CG55316	25 mg
Angiotensin II [Val5]	human	D-R-V-Y-V-H-P-F-OH	CG55304	25 mg
Angiotensin III	human	R-V-Y-I-H-P-F-OH	CG52222	25 mg
Angiotensin III [Ile7]		R-V-Y-I-H-P-I-OH	CG55251	25 mg
Apelin-13	human, bovine	Q-R-P-R-L-S-H-K-G-P-M-P-F-OH	CG55401	0.5, 1, 2.5 mg
Apelin-N-terminus	human, mouse, rat	C-S-L-D-D-S-R-S-L-T-R-I-R-OH	RB60000	100µg
Apelin-N-terminus	human, mouse, rat	Biotin-C-S-L-D-D-S-R-S-L-T-R-I-R-OH	RB60000B	100µg
Apelin-C-terminus	human, mouse, rat	C-L-S-E-A-G-L-K-G-P-P-S-OH	RB60001	100µg
Apelin-C-terminus	human, mouse, rat	Biotin-C-L-S-E-A-G-L-K-G-P-P-S-OH	RB60001B	100µg
CART	human, mouse, rat	C-A-V-R-K-G-A-R-I-G-K-OH	RB60002	100µg
Prepro-Ghrelin	human, mouse, rat	C-A-L-A-G-W-L-R-P-E-D-G-Q-A-E-G-A-E-D-E-L-E-V-R-OH	RB60003	100µg
Ghrelin (human)	human	G-S-S(n-octanoyl)-F-L-S-P-E-H-Q-R-V-Q-R-K-E-S-K-K-P-P-A-K-L-Q-P-R-OH	CG51515	1, 5 mg
Ghrelin (Rat)	rat	G-S-S(n-octanoyl)-F-L-S-P-E-H-Q-K-A-Q-Q-R-K-E-S-K-K-P-P-A-K-L-Q-P-R-OH	CG51514	1, 5 mg
GHRF	mouse	H-V-D-A-I-F-T-T-N-Y-R-K-L-L-S-Q-L-Y-A-R-K-V-I-Q-D-I-M-N-K-Q-G-E-R-I-Q-E-Q-R-A-R-L-S-OH	CG55415	0.5, 1, 2.5 mg
GHRF (1-44)	human	Y-A-D-A-I-F-T-N-S-Y-R-K-V-L-G-Q-L-S-A-R-K-L-L-Q-D-I-M-S-R-Q-Q-G-E-S-N-Q-E-R-G-A-R-A-R-L-NH2	CG52257	1 mg

RayBio® Peptides (Adipokine & Obesity Related)

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Peptides

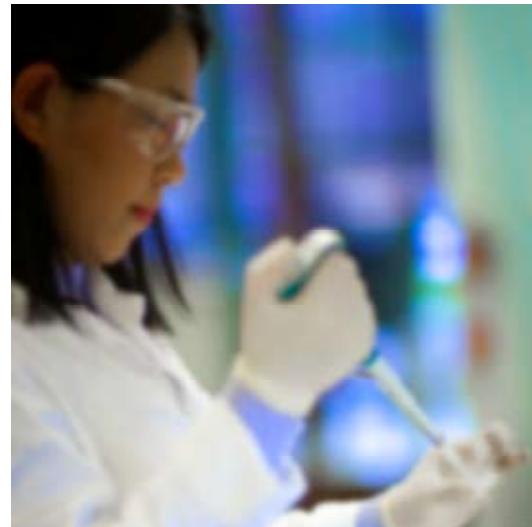
Product	Species	Description	Cat No.	Size
GHRF,	bovine	Y-A-D-A-I-F-T-N-S-Y-R-K-V-L-G-Q-L-S-A-R-K-L-L-Q-D-I-M-N-R-Q-Q-G-E-R-N-Q-E-Q-G-A-K-V-R-L-NH2	CG55420	0.5, 1, 2.5 mg
GHRF,	ovine	Y-A-D-A-I-F-T-N-S-Y-R-K-I-L-G-Q-L-S-A-R-K-L-L-Q-D-I-M-N-R-Q-Q-G-E-R-N-Q-E-Q-G-A-K-V-R-L-NH2	CG55421	0.5, 1, 2.5 mg
GHRP-2		dA-d2Nal-A-W-dF-K-NH2	CG55255	0.5, 1, 2.5 mg
GHRP-6		H-dW-A-W-dF-K-NH2	CG55254	1, 2, 5 mg
Glucagon	human	H-S-Q-G-T-F-T-S-D-Y-S-K-Y-L-D-S-R-R-A-Q-D-F-V-Q-W-L-M-N-T-OH	CG52256	1 mg
Glucagon (19-29)	human	A-Q-D-F-V-Q-W-L-M-N-T-OH	CG55367	5 mg
Glucagon-Like Peptide II	rat	H-A-D-G-S-F-S-D-E-M-N-T-I-L-D-N-L-A-T-R-D-F-I-N-W-L-I-Q-T-K-I-T-D-OH	CG55288	0.5, 1, 2.5 mg
Glucagon-Like Peptide II	human	H-A-D-G-S-F-S-D-E-M-N-T-I-L-D-N-L-A-A-R-D-F-I-N-W-L-I-Q-T-K-I-T-D-OH	CG55292	0.5, 1, 2.5 mg
Glucagon-Like Peptide II [Ala19]	rat	H-A-D-G-S-F-S-D-E-M-N-T-I-L-D-N-L-A-A-R-D-F-I-N-W-L-I-Q-T-K-I-T-D-OH	CG55287	0.5, 1, 2.5 mg
Leptin (116-130)	mouse	S-C-S-L-P-Q-T-S-G-L-Q-K-P-E-S-OH	CG55148	0.5, 1, 2.5 mg
Leptin (22-56); OBGRP	human	V-P-I-Q-K-V-Q-D-D-T-K-T-L-I-K-T-I-V-T-R-I-N-D-I-S-H-T-Q-S-V-S-S-K-Q-K-OH	CG52266	1 mg
Nesfatin (C-terminus)	human, mouse, rat	C-M-N-E-V-D-T-N-K-D-R-L-V-T-OH	RB60004	100µg
Nesfatin (C-terminus)	human, mouse, rat	Biotin-C-M-N-E-V-D-T-N-K-D-R-L-V-T-OH	RB60004B	100µg
Nesfatin (N-terminus)	human, mouse, rat	C-T-A-L-E-A-V-P-I-D-V-D-K-T-K-OH	RB60005	100µg
Obestatin	human, mouse, rat	C-F-N-A-P-F-D-V-G-I-K-L-S-G-V-Q-Y-Q-H-S-Q-A-L-OH	RB60006	100µg
Omentin (C-terminus)	human, mouse, rat	C-G-D-F-S-G-F-D-W-S-G-Y-G-T-H-OH	RB60007	100µg
Omentin (C-terminus)	human, mouse, rat	Biotin-C-G-D-F-S-G-F-D-W-S-G-Y-G-T-H-OH	RB60007B	100µg
Omentin (N-terminus)	human, mouse, rat	C-P-S-A-F-D-G-L-Y-F-L-R-T-OH	RB60008	100µg
Peptide YY	human	Y-P-I-K-P-E-A-P-G-E-D-A-S-P-E-E-L-N-R-Y-Y-A-S-L-R-H-Y-L-N-L-V-T-R-Q-R-Y-NH2	CG52296	1, 2, 5 mg
Peptide YY (3-36), PYY	human	I-K-P-E-A-P-G-E-D-A-S-P-E-E-L-N-R-Y-Y-A-S-L-R-H-Y-L-N-L-V-T-R-Q-R-Y-NH2	CG55293	0.5, 1, 2.5 mg
Peptide YY, porcine	porcine	Y-P-A-K-P-E-A-P-G-E-D-A-S-P-E-E-L-S-R-Y-Y-A-S-L-R-H-Y-L-N-L-V-T-R-Q-R-Y-NH2	CG52297	1, 2, 5 mg
POMC	human, mouse, rat	C-T-L-F-K-N-A-I-I-K-N-A-Y-K-K-G-E-OH	RB60014	100µg
ReI� alpha	human, mouse, rat	C-V-E-N-K-V-K-E-L-L-A-N-P-A-N-OH	RB60009	100µg
ReI� beta	human, mouse, rat	C-S-L-D-S-V-M-D-K-K-I-D-V-OH	RB60010	100µg
Vaspin	human, mouse, rat	C-K-P-Y-L-L-L-I-Y-S-E-K-I-P-S-V-L-F-L-G-K-I-OH	RB60011	100µg
Visfatin (C-terminus)	human, mouse, rat	C-V-T-K-S-Y-S-F-D-E-I-R-K-N-A-Q-L-N-I-E-L-E-A-A-H-H-OH	RB60012	100µg
Visfatin (C-terminus)	human, mouse, rat	Biotin-C-V-T-K-S-Y-S-F-D-E-I-R-K-N-A-Q-L-N-I-E-L-E-A-A-H-H-OH	RB60012B	100µg
Visfatin (N-terminus)	human, mouse, rat	C-Y-W-L-T-N-W-I-E-T-I-L-V-Q-S-W-Y-OH	RB60013	100µg
Urocortin	human	D-N-P-S-L-S-I-D-L-T-F-H-L-L-R-T-L-L-E-L-A-R-T-Q-S-Q-R-E-R-A-E-Q-N-R-I-I-F-D-S-V-NH2	CG52314	2.5 mg



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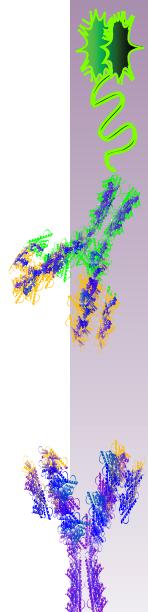
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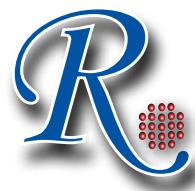
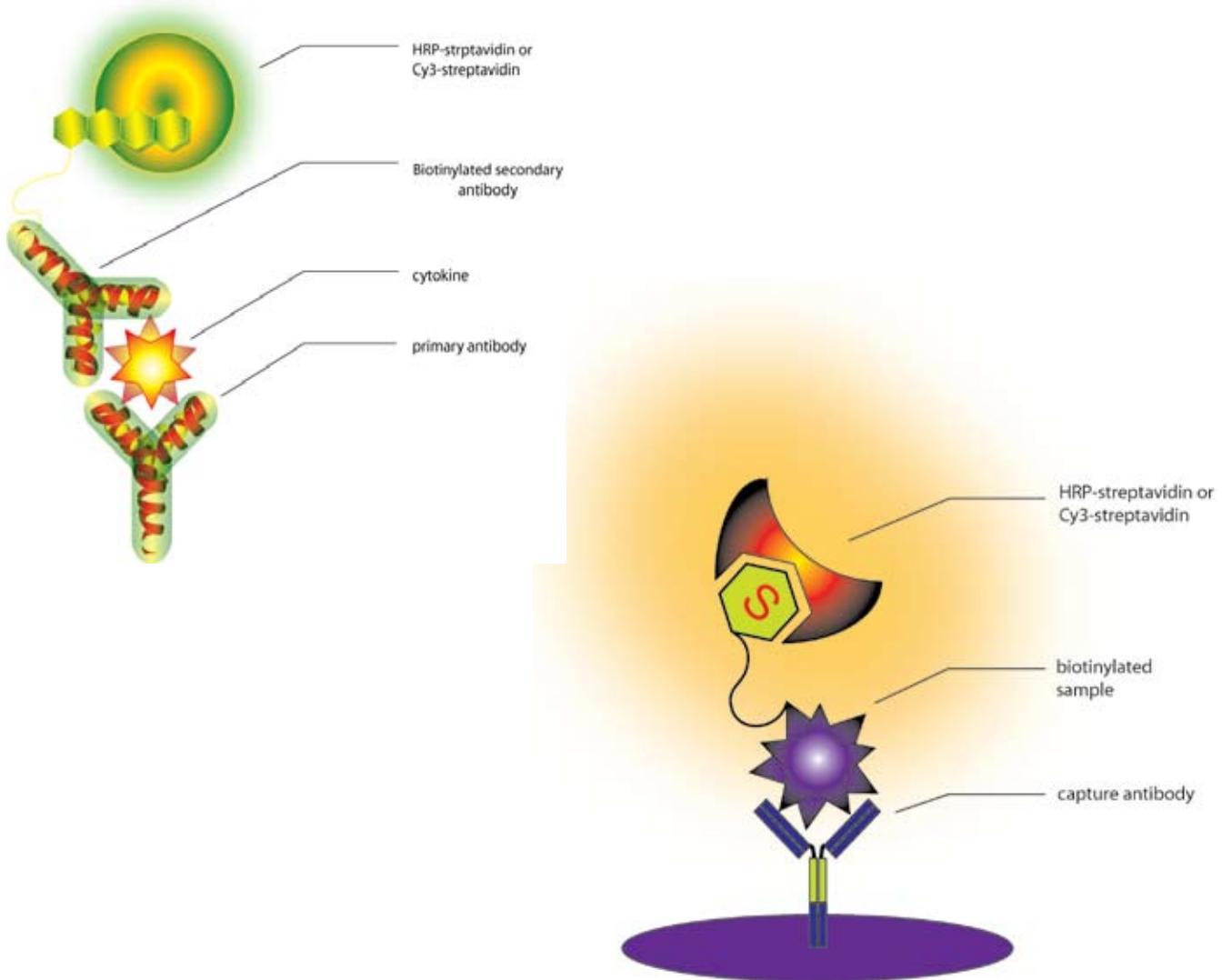
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