RAYPLEX BEAD ARRAYS

CYTOMETRIC BEAD-BASED ARRAYS
FOR ANY FLOW CYTOMETER

Illuminate Your Insights with Bead-to-Bead Precision

Less sample = more data
Up to 40 proteins can be quantified from 25 µl of sample (or less)

Compatible with most flow cytometers
Laser requirement: blue or green (PE channel) and red (APC channel)

Customizable panels
Choose your own panel from our validated antibody pairs

bioNova científica, s.l.

RayBiotech
Empowering your proteomics

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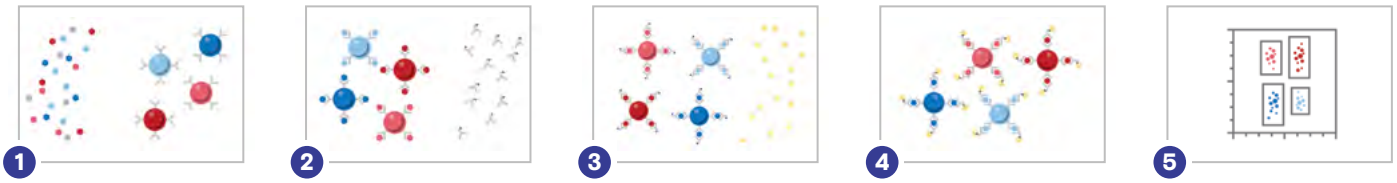
HOW IT WORKS



1 SAMPLE PROTEINS + ANTIBODY-COATED FLUORESCENT BEADS

2 ADD BIOTINYLATED DETECTION ANTIBODIES

3 ADD PE-CONJUGATED STREPTAVIDIN

4 FLOW CYMETRY

5 DATA ANALYSIS

RayPlex® cytometric bead arrays are sandwich immunoassay kits that use capture antibodies immobilized on microspheres to capture a panel of target proteins and phycoerythrin (PE) fluorescently-labeled detection antibodies to visualize the captured target protein. The protein levels can be quantified by comparing the PE signal to a standard curve. By using different combinations of microbead sizes and fluorophores, multiple target proteins are analyzed simultaneously.

PRE-MADE KITS

Choose from over 25 pre-made panels targeting human, mouse, rat, or porcine.

Human

Human B Cell Cytokine Array 1
BAFF, CD40 L, IFNγ, IL-10, IL-12p70, IL-13, IL-17A, IL-2, IL-4, IL-6, IL-7, TNFα, TNFβ

Human Cell Death Array 1
Bcl-2, BID, Caspase-3, CD40, CD40 L, Fas, Fas L, TNFα, TNFβ, TNF RI, TNF RII, TRAIL RI, TRAIL RII

Human Chemokine Array 1
Eotaxin-1, GROα, IL-8, IP-10, MCP-1, MDC, MIG, MIP-1α, MIP-1β, RANTES, TARC

Human Cytotoxic T Cell Array 1
Fas, Fas L, Granzyme A, IFNγ, IL-10, IL-17A, IL-2, IL-4, IL-6, TNFα, TNFβ, TRAIL

Human Growth Factor Array 1
ANG-2, bFGF, EGF, G-CSF, GM-CSF, HGF, M-CSF, PDGF-AA, PDGF-BB, SCF, TGFα, VEGF-A

Human Hematopoietic Stem Cell Array 1
Flt-3L, G-CSF, GM-CSF, IL-3, IL-4, IL-5, IL-6, IL-7, IL-11, IL-34, LIF, M-CSF, SCF

Human Inflammation Array 1
G-CSF, IFNγ, IL-10, IL-12p70, IL-13, IL-17A, IL-1β, IL-2, IL-23p19, IL-4, IL-6, MCP-1, TNFα

Human Mesenchymal Stem Cell Array 1
Eotaxin-1, GROα, ICAM-1, IL-6, IL-8, IL-10, IP-10, MCP-1, MIP-1α, MIP-1β, RANTES, TGFβ, VEGF-A

Human Neuroinflammation Array 1
βNGF, BDNF, Fractalkine, IL-18, IL-6, MCP-1, RAGE, TGFβ1, TNFα, TREM-2, VEGF

Human Alzheimer's Disease Magnetic Array 1
pTau181, pTau217

Human Cytokine Storm Array 1
bFGF, Eotaxin-1, G-CSF, GM-CSF, IFNγ, IL-10, IL-12p70, IL-13, IL-15, IL-17A, IL-1β, IL-1Ra, IL-2, IL-4, IL-5, IL-6, IL-7, IL-8, MCP-1, MIP-1α, MIP-1β, PDGF-BB, RANTES, TNFα, VEGF-A

Human T Helper Cell Cytokine Array 1
GM-CSF, IFNγ, IL-10, IL-13, IL-15, IL-17A, IL-1β, IL-2, IL-22, IL-33, IL-4, IL-5, IL-6 and TNF-α

Human Anti-Viral Array 1
GM-CSF, IFNγ, IL-1β, IL-10, IL-12p70, IL-15, IL-18, IL-2, IL-6, IL-8, MIP-1α, MIP-1β, RANTES, TNFα

Human Inflammation Magnetic Array 1
G-CSF, IFNγ, IL-1β, IL-10, IL-12p70, IL-17A, IL-2, IL-23p19, IL-4, IL-6, MCP-1, TNFα

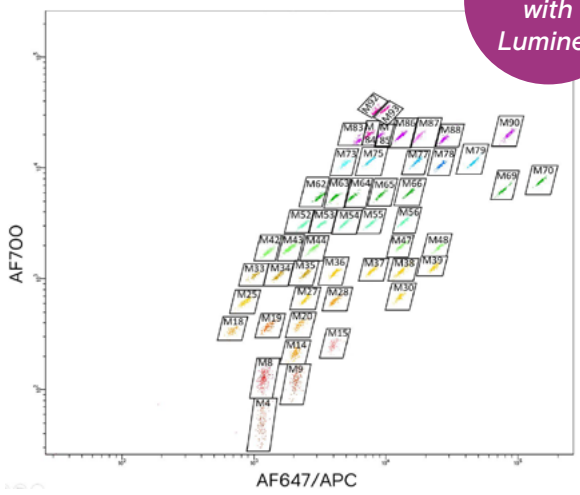
Human Cytokine-175 Magnetic Array

Compatible with Luminex

Our largest cytometric bead array ever!

Capable of measuring 175 key human cytokines at once, this array features six groups of various cytokines, chemokines, receptors, and growth factors that play pivotal roles in homeostasis and disease development.

Magnetic beads allow for the use of an automatic plate washing system with magnetic separation ability to make your job easier!



Mouse

Mouse B-Cell Array
BAFF, BCMA, IFNγ, IL-10, IL-12p70, IL-13, IL-17A, IL-2, IL-4, IL-6, TGFβ1, TNFα

Mouse Chemokine Array 1
BLC, Eotaxin-1, Fractalkine, I-TAC, KC, MCP-1, MDC, MIG, MIP-1β, MIP-3α, RANTES, TARC

Mouse Cytotoxic T Cell Array 1
Fas, Fas L, Granzyme B, IFNγ, IL-10, IL-17A, IL-2, IL-4, IL-6, TNFα, TNFβ, TRAIL

Mouse Inflammation Array 1
G-CSF, IFNγ, IL-10, IL-12p70, IL-17A, IL-1β, IL-2, IL-23p19, IL-4, IL-6, KC, MCP-1, TNFα

Mouse Macrophage Array 1
G-CSF, IL-1β, IL-10, IL-12p70, IL-18, IL-23, IL-6, KC, MDC, TARC, TGFβ1, TNFα

Mouse T Helper Cell Array 1
IFNγ, IL-10, IL-13, IL-17A, IL-2, IL-22, IL-23p19, IL-4, IL-5, IL-6, IL-9, TNFα

Mouse Hematopoietic Stem Cell Magnetic Array 1
Erythropoietin, GM-CSF, IL-15, IL-3, IL-34, IL-5, IL-6, LIF, M-CSF, SCF, SDF-1α, TGFβ1

Mouse Inflammation Magnetic Array 1
G-CSF, IFNγ, IL-10, IL-12p70, IL-17A, IL-1β, IL-2, IL-23p19, IL-4, IL-6, MCP-1, TNFα

Mouse Anti-Virus Response Magnetic Array 1
GM-CSF, IFNβ, IFNγ, IL-1β, IL-10, IL-12p70, IL-6, IP-10, KC, MCP-1, RANTES, TNFα

Other Species

Rat Inflammation Array 1
Eotaxin, IFNγ, IL-10, IL-13, IL-17A, IL-1β, IL-2, IL-2Rα, IL-4, IL-6, KC, TNFα

Porcine Inflammation Array 1
IFNγ, IL-10, IL-12p40, IL-13, IL-17A, IL-1β, IL-2, IL-4, IL-6, IL-8, MCP-1, TNFα

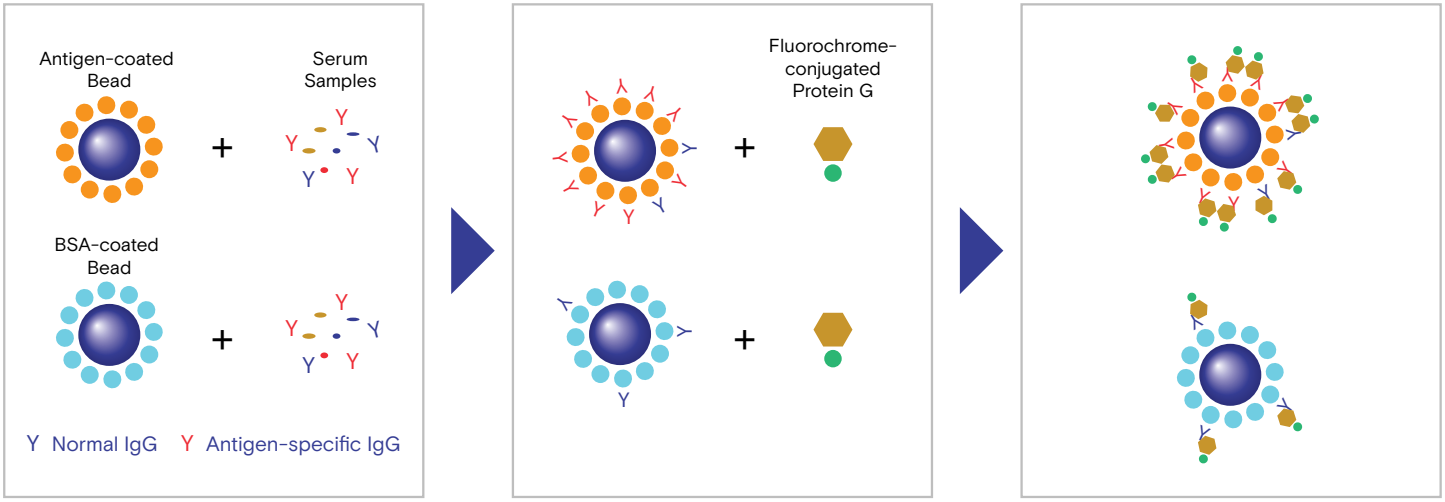
CUSTOM ARRAYS

Don't see a pre-made kit you need? Ask us to customize it for you! Choose from our vast library of antibody pairs to create an array panel specific to your research.

ANTIGEN ARRAYS

RayPlex® antigen arrays are used for the simultaneous detection of multiple antibodies using very small sample volumes.

Using antigens (proteins, lipids, or nucleic acids) immobilized onto microspheres, specific antibodies in the sample can be captured, bound by fluorochrome-conjugated protein G, and detected by any flow cytometer with red and blue lasers. Corresponding beads conjugated with the same amount of BSA serve as control beads to evaluate non-specific antibody binding. Mean Fluorescence Intensity (MFI) reading of the Antigen-Beads minus the MFI of the BSA-Beads reflects the amount of antigen-specific antibodies in an unknown sample.



DRUG ANTIBODY (DA) AND ANTI-DRUG ANTIBODY (ADA) ASSAYS

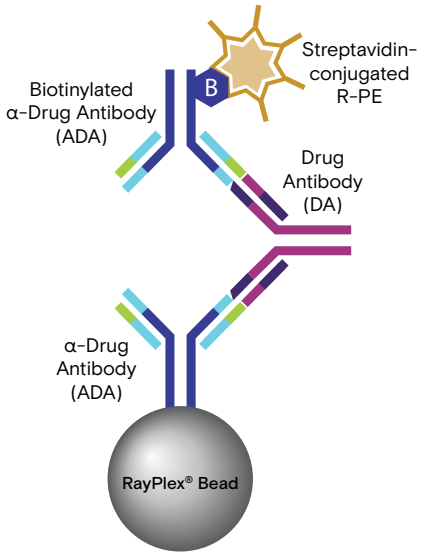
RayBio® DA and ADA cytometric bead assays are designed for the quantification of therapeutic drug antibodies or anti-drug antibodies resulting from immune response to a drug, respectively.

Determine critical pharmacokinetic characteristics including:

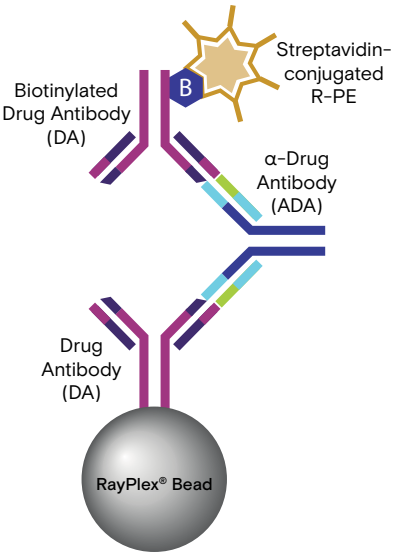
- Drug Absorption Rate
- Drug Distribution
- Drug Elimination (Half-life)
- Drug Immunogenicity

Target	Drug Antibody (DA)	Anti-Drug Antibody (ADA)
C5	Eculizumab	Anti-Eculizumab
CD20	Obinutuzumab	Anti-Obinutuzumab
CD20	Rituximab	Anti-Rituximab
CD274	Durvalumab	Anti-Durvalumab
CD38	Daratumumab	Anti-Daratumumab
CTLA-4	Ipilimumab	Anti-Ipilimumab
EGFR	Cetuximab	Anti-Cetuximab
EGFR	Panitumumab	Anti-Panitumumab
HER2	Pertuzumab	Anti-Pertuzumab
HER2	Trastuzumab	Anti-Trastuzumab, Anti-Trastuzumab Total IgG
Human IgE	Omalizumab	Anti-Omalizumab
IL-12 and IL-23	Ustekinumab	Anti-Ustekinumab
IL-4Rα	Dupilumab	Anti-Dupilumab
IL-6R	Sarilumab	Anti-Sarilumab
IL-6R	Tocilizumab	Anti-Tocilizumab
PD-1	Nivolumab	Anti-Nivolumab
PD-1	Pembrolizumab	Anti-Pembrolizumab
PD-L1	Atezolizumab	Anti-Atezolizumab
PD-L1	Avelumab	Anti-Avelumab
RANK-L	Denosumab	Anti-Denosumab
RSV F	Palivizumab	Anti-Palivizumab
TNFα	Adalimumab	Anti-Adalimumab
TNFα	Etanercept	Anti-Etanercept
TNFα	Golimumab	Anti-Golimumab
TNFα	Infliximab	Anti-Infliximab
VEGF-A	Bevacizumab	Anti-Bevacizumab
VEGF-A	Ranibizumab	Anti-Ranibizumab

DETECT DAs



DETECT ADAs



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