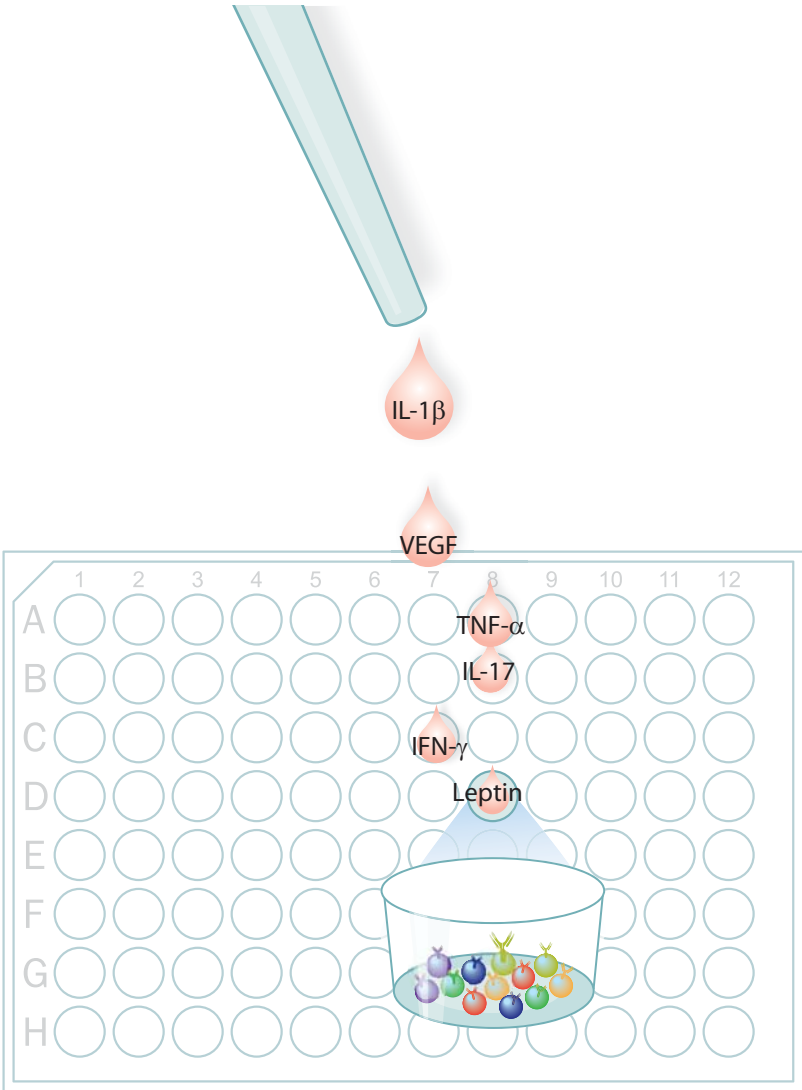
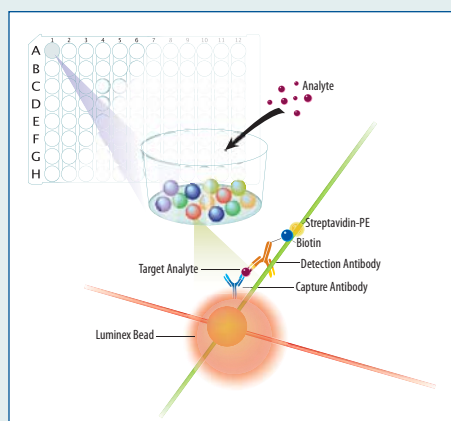


Luminex® Screening & Performance Assays

Bead-based Multiplex Kits



Luminex Screening and Performance Assays are bead-based multianalyte profiling kits. The kits utilize color-coded polystyrene or superparamagnetic microparticles coated with antibodies that specifically recognize the target analytes. The different analyte-specific beads are mixed and incubated with the sample. Captured analytes are subsequently detected using a cocktail of biotinylated detection antibodies and a streptavidin-phycoerythrin conjugate.



Kits are available in two formats depending on the target analytes:

Polystyrene beads

Polystyrene beads are designed for use with the Luminex 100™, Luminex 200™, or Bio-Rad® Bio-Plex® dual laser analyzers. One laser in these instruments determines the color of each bead while the second laser determines the magnitude of the PE-derived signal, which is directly proportional to the amount of analyte bound.

Magnetic beads

Magnetic beads are compatible with the Luminex MAGPIX®, Luminex 100, Luminex 200, and Bio-Rad Bio-Plex analyzers. The Luminex MAGPIX analyzer utilizes a magnet to hold the superparamagnetic microparticles in a monolayer while two spectrally distinct light-emitting diodes (LEDs) illuminate the beads. One LED identifies the analyte that is being detected while the second LED determines the magnitude of the PE-derived signal. Each well is imaged with a charge-coupled device (CCD) camera.

Luminex Screening Assays

Luminex Screening Assays are our most flexible kits for multianalyte profiling of cell culture supernates, serum, or plasma samples. Kits include a multi-purpose diluent that allows up to 60 human biomarkers to be simultaneously profiled. The analytes for the user-defined multiplex are selected from a broad and rapidly expanding menu and are supplied as premixed kits.

- ✓ Flexible: Up to 60 human biomarkers can be simultaneously profiled
- ✓ The most cost-effective assay for profiling multiple markers
- ✓ Offers a menu that will be rapidly expanding
- ✓ All assays can be performed in 3-3.5 hrs
- ✓ Assays require a small sample volume (<50 µL)
- ✓ Reagents are supplied as premixed kits and shipped in 3-5 days from the date of order

For more information, please visit our website at www.RnDSystems.com/LuminexScreening

Analytes available in the polystyrene bead format

Adiponectin/Acrp30	CXCL10/IP-10	IL-2	ROB04 <i>coming soon</i>
Aggrecan	CXCL11/I-TAC	IL-4	E-Selectin/CD62E
Angiopoietin-2 <i>coming soon</i>	CXCL13/BLC/BCA-1 <i>coming soon</i>	IL-5	P-Selectin/CD62P
BAFF/BLyS <i>coming soon</i>	Dcr3/TNFRSF6B	IL-6	Serpin E1/PAI-1 <i>coming soon</i>
BCMA/TNFRSF17	Dkk-1 <i>coming soon</i>	IL-10	SHBG <i>coming soon</i>
BMP-2	EGF	IL-12 p70	SOST <i>coming soon</i>
BMP-4	EphA2	IL-17A	ST2/IL-1 R4
BMP-9	Fas/TNFRSF6	IL-18 BPa	TACI/TNFRSF13B
Cardiac Troponin I/cTNI <i>coming soon</i>	Fas Ligand <i>coming soon</i>	IL-19	Tie-1
CCL2/MCP-1	FGF basic	IL-22 <i>coming soon</i>	Tie-2
CCL3/MIP-1α	FGF-21	IL-23	Thrombopoietin/Tpo
CCL4/MIP-1β	Fibrinogen <i>coming soon</i>	IL-27	TNF-α
CCL5/RANTES	Galectin-3 <i>coming soon</i>	IL-28A/IFN-λ2	TNF RI/TNFRSF1A
CCL8/MCP-2 <i>coming soon</i>	G-CSF	IL-31 <i>coming soon</i>	TNF RII/TNFRSF1B
CCL13/MCP-4 <i>coming soon</i>	GDF-15	IL-33	TRAIL R3/TNFRSF10C
CCL20/MIP-3α <i>coming soon</i>	GM-CSF	Leptin/OB	VCAM-1/CD106
CD14 <i>coming soon</i>	HB-EGF	MMP-1	VEGF
CD27/TNFRSF7	HGF	MMP-2	VEGF R1/Flt-1
CD30/TNFRSF8	ICAM-1/CD54	MMP-3	VEGF R3/Flt-4
CD40/TNFRSF5	IFN-γ	MMP-7	
Chitinase 3-like 1/YKL40	IFN-γ R1	MMP-8	
Comp. Factor D/Adipsin	IL-1α/IL-1F1	MMP-9	
Cripto-1	IL-1β/IL-1F2	MMP-12	
C-Reactive Protein/CRP	IL-1ra/IL-1F3	MMP-13	
CXCL1/GROα	IL-1 RI	Myoglobin <i>coming soon</i>	
CXCL5/ENA-78	IL-1 RII	PCSK9 <i>coming soon</i>	
CXCL8/IL-8		RAGE <i>coming soon</i>	

* Analytes listed as coming soon above will be available in **June 2013**

Analytes available in the magnetic bead format

Select up to 25 phospho-RTKs from one of the panels below.

Human Phospho-RTK Kit A		Human Phospho-RTK Kit B	
EGF R/ErbB1	EphB6	ALK/CD246	PDGF Rα
EphA1	ErbB2/Her2	Axl	PDGF Rβ
EphA2	ErbB3/Her3	DDR1	PTK7/CCK4
EphA3	ErbB4/Her4	DDR2	ROR1
EphA4	Flt-3/Flk-2	Dtk	ROR2
EphA5	HGF R/c-MET	FGF R1	Tie-1
EphA6	IGF-1 R	FGF R2α	Tie-2
EphA7	M-CSF R	FGF R3	TrkB
EphA8	MSP R/Ron	FGF R4	TrkC
EphB1	Ret	Insulin R/CD220	VEGF R1/Flt-1
EphB2	SCF R/c-kit	LTK	VEGF R2/KDR
EphB3	TrkA	Mer	VEGF R3/Flt-4
EphB4		MuSK	

www.RnDSystems.com

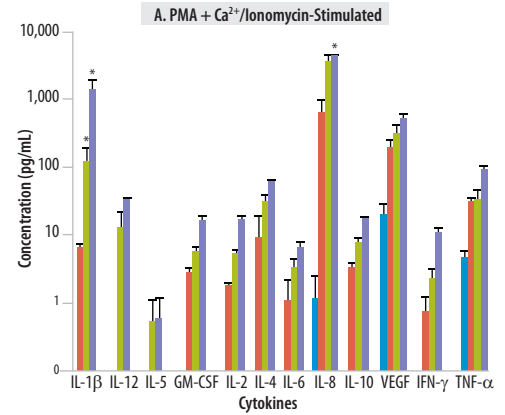
Analytes shown in **blue** are only available from R&D Systems.

Luminex Performance Assays

Luminex Performance Assays are our most accurate and precise bead-based multianalyte profiling kits. All analytes in a given panel are tested together to ensure optimal kit performance for the entire panel. Analytes can be ordered either as a complete panel or as a smaller subset from any panel shown below. The kits can be used to measure target analytes in qualified sample types, which may include cell culture supernates, serum, plasma, urine, saliva, and milk.

- ✓ Kits undergo similar validation testing as the Quantikine® single analyte assays and are correlated with Quantikine ELISAs, when available
- ✓ Kits consist of base kits and bead sets, which can be ordered individually or as premixed kits
- ✓ Kits are available for human, mouse, and rat analytes
- ✓ All assays can be performed in 2.5-5 hrs
- ✓ Assays require a small sample volume (<100 µL)
- ✓ Kits containing beads that the user will mix are delivered 1 day after the order is placed; kits containing beads that we mix are delivered in 2-4 days

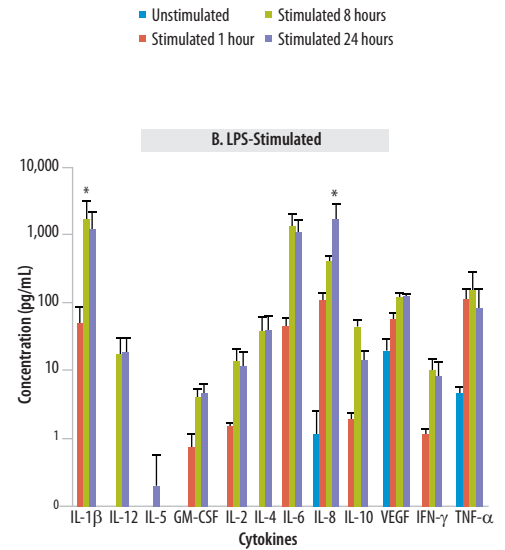
For more information, please visit our website at www.RnDSystems.com/LuminexPerformance



Analytes available in the polystyrene bead format

Human Biomarker Panel A	Human Cytokine Panel B	Mouse Cytokine Panel	Rat Cytokine Panel
BAFF/BLYS	CCL11/Eotaxin	CCL2/JE/MCP-1	CXCL2/CINC-3
CCL20/MIP-3α	CD40 Ligand/TNFSF5	CXCL1/KC	CXCL3/CINC-2α/β
CD14	CXCL10/IP-10	CXCL2/MIP-2	GM-CSF
CD27/TNFRSF7	CXCL11/I-TAC	GM-CSF	ICAM-1/CD54
CXCL13/BLC/BCA-1	EGF	IFN-γ	IFN-γ
gp130	HGF	IL-1β/IL-1F2	IL-1α/IL-1F1
IL-2 Rα	IL-12 p70	IL-2	IL-1β/IL-1F2
IL-6 Rα	IL-13	IL-4	IL-2
TNF RII/TNFRSF1B	Leptin/OB	IL-5	IL-4
Human Cardiac Panel A	Human Obesity Panel	IL-6	IL-6
CD40 Ligand/TNFSF5	Adiponectin/Acrp30	IL-10	IL-10
GDF-15	C-Reactive Protein/CRP	IL-12 p70	IL-13
Pappalysin-1/PAPP-A	CCL2/MCP-1	IL-13	IL-18/IL-1F4
PCSK9	Comp. Factor D/Adipsin	IL-17	L-Selectin/CD62L
ST2/IL-1 R4	IL-6	TNF-α	TIMP-1
TNF RII/TNFRSF1B	IL-10	VEGF	TNF-α
Human Cardiac Panel B	Leptin/OB	Human Adhesion Molecule 4-plex*	VEGF
C-Reactive Protein/CRP	Resistin	ICAM-1/CD54	TGF-β1
Cystatin C	Serpin E1/PAI-1	E-Selectin/CD62E	TGF-β2
Myeloperoxidase/MPO	TNF-α	P-Selectin/CD62P	TGF-β3
P-Selectin/CD62P	Rat Kidney Toxicity Panel	VCAM-1/CD106	
Serpin E1/PAI-1	Cystatin C		
TIMP-1	FABP1/L-FABP		
	Lipocalin-2/NGAL		
	Osteopontin		
	TIM-1/KIM-1/HAVCR		

*These kits are only available as premixed kits.



Multiplex Measurement of PMA/Ca²⁺/Ionomycin or LPS-stimulated Cytokine Production in Cultured Whole Blood. Whole blood samples from apparently healthy donors were cultured for one, eight, or twenty-four hours in the presence of A) phorbol 12-myristate 13-acetate (PMA; 50 ng/mL) and Ca²⁺/Ionomycin (500 ng/mL) or B) lipopolysaccharide (LPS; 50 ng/mL). Samples were taken from unstimulated and stimulated cultures and centrifuged to collect plasma. The levels of the indicated cytokines were simultaneously quantified using the Luminex Performance Human High Sensitivity Cytokine Panel (Catalog # LHSC000). Columns represent the mean of four whole blood samples + the standard deviation. *One or more of the results were above the range of the standard curve and the value was extrapolated.

Analytes available in the magnetic and polystyrene bead format

Human Angiogenesis Panel	Human Cytokine Panel A	Human High Sensitivity Cytokine Panel	Human MMP Panel	Human TIMP 4-plex*
Angiogenin	CCL2/MCP-1	IL-1ra/IL-1F3	MMP-1	TIMP-1
Angiopoietin-1	CCL3/MIP-1α	IL-2	MMP-2	TIMP-2
Endostatin	CCL4/MIP-1β	IL-4	MMP-3	TIMP-3
FGF acidic	CCL5/RANTES	IL-5	MMP-7	TIMP-4
FGF basic	CXCL5/ENA-78	IL-6	MMP-8	
PDGF-AA	CXCL8/IL-8	IL-10	MMP-9	
PDGF-BB	FGF basic	IL-17	MMP-10	
PIGF	G-CSF	TNF-α	MMP-12	
Thrombospondin-2	GM-CSF	Thrombopoietin/Tpo	MMP-13	
VEGF	IFN-γ	VEGF	EMMPRIN	
VEGF-D	IL-1α/IL-1F1			
	IL-1β/IL-1F2			

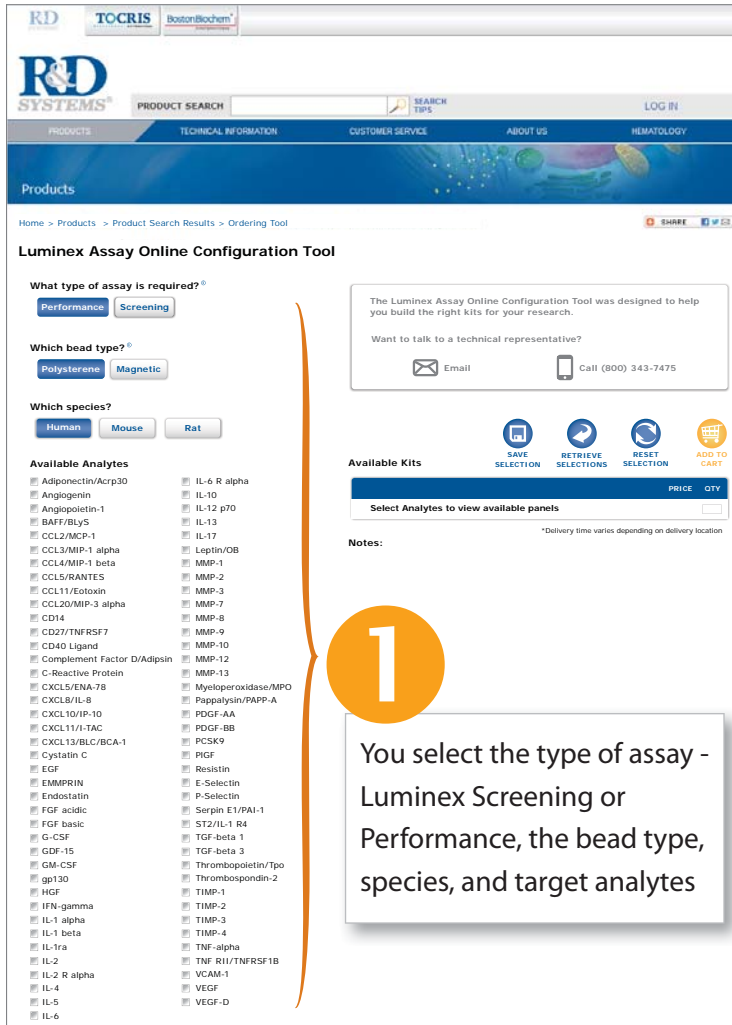
*This kit is only available as a premixed kit.

For research use only. Not for use in diagnostic procedures.

Analytes shown in blue are only available from R&D Systems.

Coming Soon!

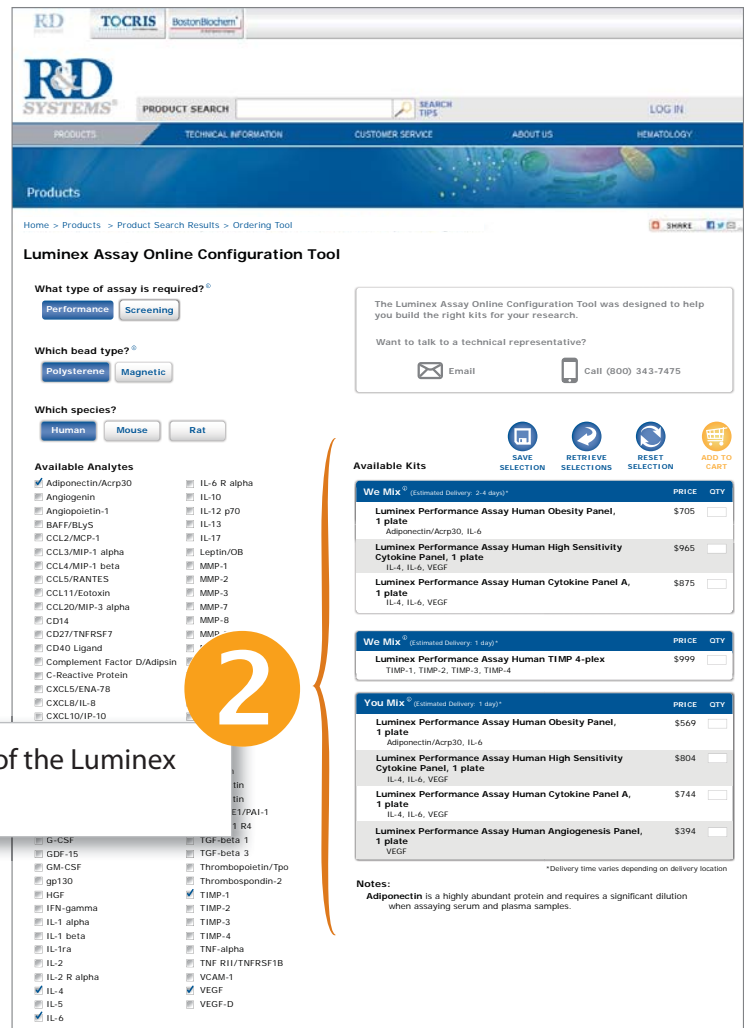
A New Online Luminex Assay Configuration & Ordering Tool



1

You select the type of assay - Luminex Screening or Performance, the bead type, species, and target analytes

A new online Luminex assay configuration and ordering tool will soon be available to help researchers design and order bead-based multiplex kits. Using this tool, the researcher will indicate if they need to run a screening or performance assay, whether the beads should be polystyrene or magnetic depending on the type of instrumentation that is available, the species that the sample is from, and the target analytes of interest. As the target analytes are selected, the configuration and ordering tool will provide a list of the Luminex multiplex kits that can be used to measure the indicated analytes. From this comprehensive list, the researcher can then choose which kit will work best for their specific assay.



2

We show you a comprehensive list of the Luminex assays that will meet your needs

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