

ProcartaPlex™ Multiplex Immunoassays

Get exactly the panel you want

What would the ability to simultaneously quantitate more than 60 cytokines or other soluble biomarkers from a single 25- μ L sample do for your research?

The use of multiplex immunoassays for multiple analyte detection has proven to be an invaluable tool for the comprehensive study of biological systems. As these systems are comprised of networks of secreted proteins including cytokines, chemokines, growth factors, and other proteins, multiplex immunoassays are an efficient method for biomarker profiling of a large set of proteins from a small sample.

ProcartaPlex™ Multiplex Immunoassays provide the ability to create your unique panel and the assurance that you will achieve reproducible results throughout the course of your study.

- More than 90% of ProcartaPlex assays can be combined with one another
- High correlation to our Platinum ELISA assays ($R^2 > 0.9$)
- Scalable and reproducible performance regardless of plex size
- Largest published panel for quantitation of up to 63 analytes^{1,2,3,4}

What are ProcartaPlex assays?

ProcartaPlex Multiplex Immunoassays are bead-based assays for protein quantification based on the principles of a sandwich ELISA with the use of Luminex® xMAP® (multi-analyte profiling) technology.

ProcartaPlex assays are available for use with serum, plasma, cell and tissue lysates, cell culture supernatants, and bodily fluids. Assays are provided in multiple formats across six species (human, mouse, rat, non-human primate, porcine, and canine).

ProcartaPlex Mix&Match Panels (Custom mixed)

Custom-blended and optimized panels deliver results that are tailored to the panel design of your choice and your sample type. Simply select the desired analytes from a ProcartaPlex Mix&Match list, then select sample type, bead type, and instrument type. A custom assay kit will be built and optimized for your requirements.

ProcartaPlex Simplex Sets (Off-the-shelf)

Simplex kits detect individual analytes and are designed to be added to ProcartaPlex™ panels to increase customization. Alternatively, multiple ProcartaPlex Simplex sets can be combined and run using the ProcartaPlex™ Basic Kit which includes all non-target specific reagents needed to perform the ProcartaPlex assay.

ProcartaPlex Panels (Off-the-shelf)

More than 50 pre-configured panels are available for immediate delivery. Several panels can be combined with one another or with simplex sets.



Why is the assay Luminex® based?

Profile more biomarkers with less sample amount

Quantitate up to 80 analytes simultaneously with the FLEXMAP 3D® or Luminex® 200 and up to 50 analytes with the MAGPIX®. All of our assays are compatible with as little as 25 µL of plasma or serum samples or 50 µL of cell culture supernatant sample.

High-throughput analysis

Measure several analytes simultaneously in the same time it takes to run a single ELISA assay. Luminex® assays are available in 96-well and 384-well format for high-throughput analysis.

Trusted platform and partnership

Luminex has been supplying instruments to the life science research market for almost 20 years and has over 13,000 units installed worldwide. As a certified partner of Luminex, Affymetrix has been supplying multiplexed reagents for nearly 10 years and has been a preferred supplier of high quality assays to many customers in medical and drug discovery research.



Luminex 200



FLEXMAP 3D



MAGPIX

Why ProcartaPlex™ assays?

Flexibility

Get exactly the panel you want: more than 90% of ProcartaPlex™ assays are combinable with one another. ProcartaPlex assays allow the creation of highly individual and high-plex panels. Affymetrix currently offers the largest published panel with a 63-plex.^{1,2,3,4}

Reproducible results

ProcartaPlex assays are based on the principles of sandwich ELISA: two highly specific antibodies recognize different epitopes on the same protein. Reproducible results come from reliable manufacturing. Affymetrix owns and operates a world class hybridoma facility for the manufacturing of antibodies, and these antibodies are used in ProcartaPlex assays, enabling the delivery of consistent, reproducible, and high-quality assays.

Correlation to ELISA

Switch easily from ProcartaPlex assays to ELISA and vice-versa with reliable results. A majority of our ProcartaPlex assays use the same antibody pairs as our Platinum ELISA, resulting in high correlation ($R^2 > 0.9$) between the two assays. As shown in Figure 1, equivalent results ($R^2 > 0.9$) were obtained using the ProcartaPlex™ Multiplex Immunoassays and traditional plate-based ELISAs for human and mouse IFN gamma. ProcartaPlex assays achieve quantitative results comparable to traditional ELISA results with the added benefits of reduced sample volume, shorter assay time, and lower cost.

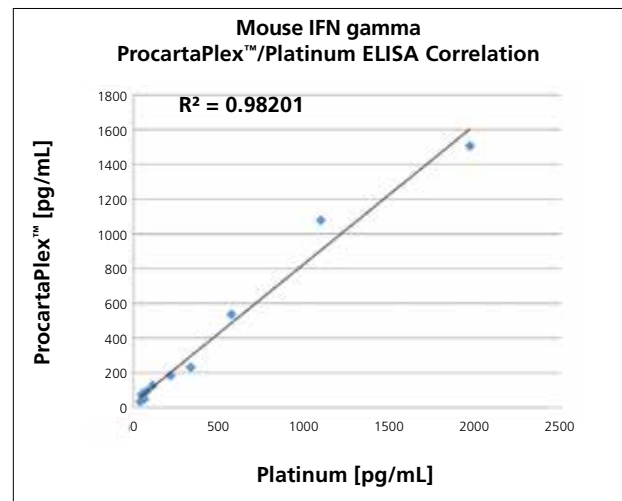
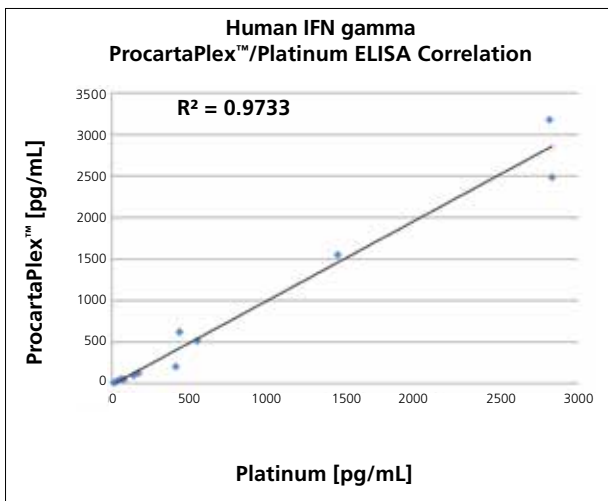


Figure 1: Results of an experiment measuring IFN gamma in stimulated human and mouse PBMCs. Supernatants were serially diluted two-fold in normal human or mouse serum, to allow for differential cytokine levels in a serum matrix. Additional cytokines for human and mouse analytes were compared including IL-1, IL-17A, and TNF alpha and similar performance was obtained, data not shown.

Scalability

The ability to scale the number of analytes investigated in multiplex experiments is critical for the progression of many projects. For example, it is not uncommon to begin a project by analyzing a large, comprehensive 35-plex cytokine panel on fewer samples (i.e., 100) to determine which analytes are affected by a particular disease or drug treatment. The resulting list of analytes can then be investigated further, for instance, using an 11-plex panel, on a larger set of samples. Thus, there is a great need for scalability in multiplex panel assays in order to enable researchers to correlate all their data across the different stages of their investigation. Many commercially available multiplex assays have not been developed with this level of consistency in mind. However, this specification is a key design requirement incorporated during the ProcartaPlex™ assay development. Data in Figures 2 and 3 illustrate the high correlation between similar analytes in a large and small panel and the scalability when using ProcartaPlex assays. Similar results are obtained when investigating other analytes.

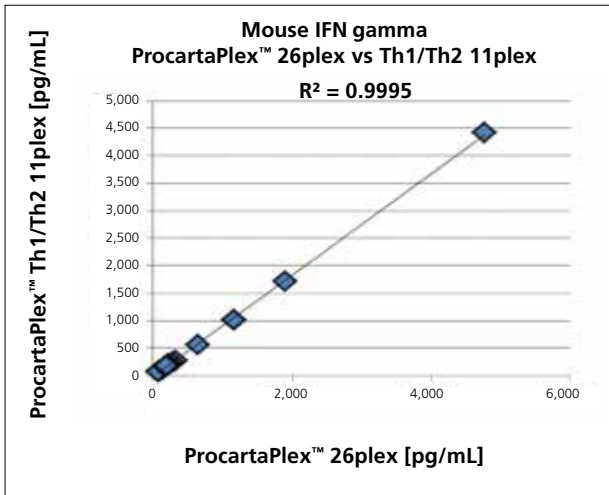


Figure 2: Data illustrates the high correlation between large- and small-scale multiplex scaling when using the ProcartaPlex™ assays. Regression analysis comparing the ProcartaPlex™ Mouse Cytokine & Chemokine Panel 1 (26 plex) and the ProcartaPlex Mouse Th1/Th2 Cytokine Panel (11 plex) revealed an R2 value > 0.9995.

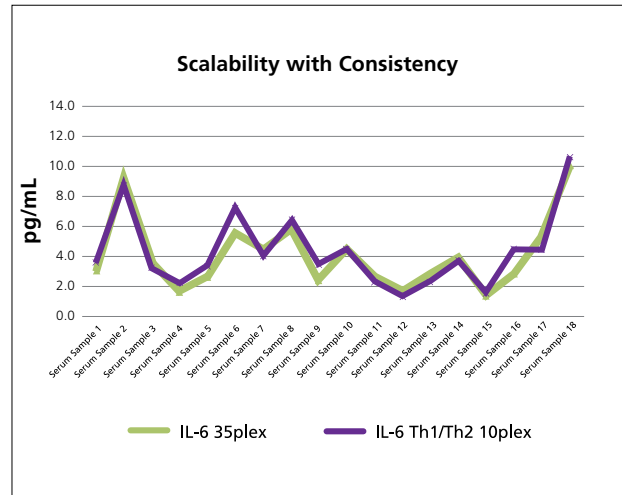


Figure 3: To illustrate the scalability of ProcartaPlex™ Multiplex Immunoassays, diseased human serum samples were run in parallel using both the ProcartaPlex™ Human Cytokine and Chemokine Panel 1A (34 plex) and the Human Th1/Th2 Cytokine Panel (11 plex). Experiments demonstrate consistency achieved in both large- and small-scale multiplex panels.

Free analysis software

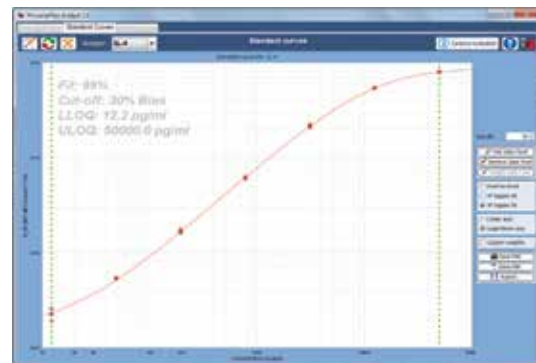
ProcartaPlex™ Analyst Software is easy-to-use yet powerful. It is compatible with *.csv file output from the Luminex® instrument and can be downloaded at www.ebioscience.com/resources

Procarta™ Analyst Software provides

- 4PL or 5PL standard curve evaluation
- Linear, logarithmic, and point-to-point fit
- Pre-defined dilution factor and standard range
- Export settings for fast and easy re-analysis
- Export graph images for publishing
- At-a-glance sample pattern with a heat map



Heat map analysis for sample concentration



5 parameter curve fit

Create your own custom panel

Build the panel of your choice with our online Panel Configurator at www.ebioscience.com. Select your analytes of interest and immediately receive recommendations for the most effective solutions for your panel needs. ProcartaPlex™ Multiplex Immunoassays represent the most flexible Luminex® assay system on the market. More than 90% of our ProcartaPlex™ assays can be combined with one another.

ProcartaPlex™ Analytes	Human	Mouse	Rat	NHP	Canine	Porcine
Adiponectin	■	■		■		
Antithrombin*	■					
April	■					
BAFF	■	■				
BLC (CXCL13)	■			■		
BDNF	■			■		
Betacellulin (BTC)		■				
Calcitonin	■					
Caspase-3 (total)	■					
CD30	■					
CD40L	■			■		
CD44var (6var)	■					
CRP	■	■	■			
CTACK (CCL27)	■					
D-Dimer	■					
DR6	■					
EDA-1	■					
EGF	■					
ENA-78 (CXCL5)	■	■				
Endoglin (CD105)	■					
Eotaxin (CCL11)	■	■	■	■		
Eotaxin-2 (CCL24)	■					
Eotaxin-3 (CCL26)	■					
E-selectin (CD62E)	■					
Factor V*	■					
Factor VII*	■					
Factor VIII*	■					
Factor IX*	■					
Factor X*	■					
Factor XI*	■					
Factor XII*	■					
Factor XIII*	■					
Fas (APO)	■					
Fas-L	■					
FGF-2	■			■		
Fibrinogen	■					
Fractalkine (CX3CL1)	■					
Galectin-3	■					
GAPDH	■					
G-CSF (CSF-3)	■	■	■	■		
GITRL	■					
GM-CSF	■	■	■	■		
Granzyme B	■			■		
GRO alpha (KC/CXCL1)	■	■	■			
HER-2	■					
HGF	■					
ICAM-1	■		■	■		
IFN alpha	■	■		■		
IFN beta	■	■				■
IFN gamma	■	■	■	■	■	■
IFN omega	■	■				
IgA*	■	■	■			
IgE*	■	■				
IgG1*	■	■	■			
IgG2*	■					
IgG2a*		■	■			
IgG2b*		■	■			
IgG2c*		■	■			
IgG3*	■	■				
IgG4*	■					
IgM*	■	■	■			
IL-1 alpha	■	■	■			
IL-1 beta	■	■	■	■		■
IL-1 RA				■		
IL-2	■	■	■	■	■	
IL-2RA (CD25)	■	■				
IL-3	■	■				
IL-4	■	■	■	■	■	■
IL-5	■	■	■	■		
IL-6	■	■	■	■	■	■
IL-7	■	■	■			
IL-7RA (CD127)			■			
IL-8 (CXCL8)	■			■	■	■
IL-9	■	■				
IL-10	■	■	■	■	■	■
IL-12/IL-23p40	■	■	■	■	■	■
IL-12 p70	■	■	■	■		
IL-13	■	■	■	■		
IL-15	■			■		
IL-15/IL-15R		■				
IL-16	■					
IL-17A (CTLA-8)	■	■	■	■		
IL17AF	■					
IL-17F	■	■		■		
IL-18	■	■		■		
IL-20	■					
IL-21	■	■				
IL-22	■	■				
IL-23	■	■		■		
IL-27	■	■				
IL-29 (IFN lambda 1)	■					
IL-31	■	■				
IL-33	■					
IP-10 (CXCL10)	■	■	■	■		
I-TAC (CXCL11)	■			■		
Leptin	■	■	■			
Light	■					
LIF	■	■				
L-selectin	■					
MCP-1 (CCL2)	■	■	■	■	■	
MCP-2 (CCL8)	■					
MCP-3 (CCL7)	■	■	■	■		
M-CSF	■	■				
MDC (CCL22)	■					
MIF	■			■		
MIG (CXCL9)	■			■		
MIP-1 alpha (CCL3)	■	■	■	■		
MIP-1 beta (CCL4)	■	■	■	■		
MIP-2 alpha (CXCL2)		■	■			
MIP-3 alpha (CCL20)	■					
MMP-1	■					
MMP-2	■					
MMP-3	■					
MMP-7	■					
MMP-8	■					
MMP-9	■					
MMP-12	■					
MMP-13	■					
Myeloperoxidase (MPO)	■					
NGF beta	■		■	■	■	
Oncostatin M (OSM)	■					
Osteopontin	■					
Osteoprotegerin (OPG)	■					
PAI-1 (Serpin)	■				■	
PDGF-BB	■			■		
PECAM-1	■					
PIGF	■					
Protein C*	■					
Protein S*	■					
Prothrombin*	■					
P-selectin	■					
RANKL	■	■	■			
RANTES (CCL5)	■	■	■	■		
Resistin (ADSF)	■			■		
SAA	■					
SAP (Pentraxin 2)	■					
SCF	■				■	■
SCGF beta	■					
SDF-1 alpha (CXCL12a)	■				■	
Survivin (BIRC5)	■					
TGF alpha	■				■	
TGF beta 1	■	■	■	■	■	■
Thrombopoietin (TPO)	■					
TIMP-1	■					
TNF alpha	■	■	■	■	■	■
TNF beta	■				■	
TNF RI	■					
TNF RII	■					
Tissue Plasmon Activator	■					
TRAIL	■				■	
TRAIL-R1	■					
TRAIL-R2	■					
TSLP	■	■				
Tweak	■					
VCAM-1	■		■	■		
VEGF-A	■	■	■	■	■	
VEGF-D	■			■		
VEGF-R1	■					
VEGF-R2	■					
VEGF-R3	■					
vWF*	■					

* Analytes only available as part of a panel

Human ProcartaPlex™ Panels

A	Th1/Th2 Cytokine Panel (11 plex)			
	Cat. No. EPX110-10810-901			
	GM-CSF	IL-2	IL-6	IL-18
	IFN gamma	IL-4	IL-12 p70	TNF alpha
	IL-1 beta	IL-5	IL-13	

B	Th9/Th17/Th22/Treg Cytokine Panel (7 plex)			
	Cat. No. EPX070-10817-901			
	IL-9	IL-17A	IL-22	IL-27
	IL-10	IL-21	IL-23	

C	Cytokine Panel 1C (7 plex)			
	Cat. No. EPX070-10010-901			
	IFN alpha	IL-1RA	IL-15	TNF beta (LTA)
	IL-1 alpha	IL-7	IL-31	

D	Chemokine Panel 1 (9 plex)			
	Cat. No. EPX090-12187-901			
	Eotaxin (CCL11)	MIP-1 alpha (CCL3)		
	GRO alpha (CXCL1)	MIP-1 beta (CCL4)		
	IL-8 (CXCL8)	SDF-1 alpha (CXCL12)		
	IP-10 (CXCL10)	RANTES (CCL5)		
	MCP-1 (CCL2)			

E	Growth Factor Panel 1 (11 plex)			
	Cat. No. EPX110-12170-901			
	BDNF	HGF	SCF	
	NGF beta	LIF	VEGF-A	
	EGF	PDGF-BB	VEGF-D	
	FGF-2	PIGF		

Human ProcartaPlex™ Panels—Additional

Essential Panel 2 (4 plex)			
Cat. No. EPX040-10008-901			
IL-10 beta	IL-8 (CXCL8)	IL-10	IL-17A (CTLA-8)

Essential Th1/Th2 Cytokine Panel (6 plex)			
Cat. No. EPX060-10009-901			
IFN gamma	IL-5	IL-12 p70	TNF alpha
IL-4	IL-6		

Inflammation Panel (15 plex)			
Cat. No. EPX200-12185-901			
E-selectin	IL-1 alpha	IL-10	MCP-1 (CCL2)
GM-CSF	IL-1 beta	IL-12p70	MIP-1 beta (CCL4)
ICAM-1	IL-4	IL-13	MIP-1 alpha (CCL3)
IFN alpha	IL-6	IL-17A (CTLA-8)	P-selectin
IFN gamma	IL-8	IP-10 (CXCL10)	TNF alpha

MMP-Panel I (5 plex)			
Cat. No. EPX050-10015-901			
MMP-1	MMP-8	MMP-12	MMP-13
MMP-7			

MMP Panel 2 (3 plex)			
Cat. No. EPX030-10829-901			
MMP-2	MMP-3	MMP-9	

Myokine Panel (8 plex)			
Cat. No. EPX080-12186-901			
BDNF	IL-6	IL-10	LIF
IL-1RA	IL-8 (CXCL8)	IL-15	TNF alpha

Human ProcartaPlex™ Panel Combinations

B	C	Th9/Th17/Th22/Treg & Cytokine Panel 1C (14 plex) Cat. No. EPX140-12174-901			
C	D	Cytokine 1C & Chemokine Panel 1 (16 plex) Cat. No. EPX160-12176-901			
B	D	Th9/Th17/Th22/Treg & Chemokine Panel 1 (16 plex) Cat No. EPX160-12175-901			
A	C	Th1/Th2 & Cytokine Panel 1C (18 plex) Cat. No. EPX180-12172-901			
A	B	Th1/Th2/Th9/Th17/Th22/Treg Cytokine Panel (18 plex) Cat. No. EPX180-12165-901			
A	D	Th1/Th2 & Chemokine Panel 1 (20 plex) Cat. No. EPX200-12173-901			
A	B	C	Cytokine Panel 1B (25 plex) Cat. No. EPX250-12166-901		
A	B	C	D	Cytokine & Chemokine Panel 1A (34 plex) Cat. No. EPX340-12167-901	
A	B	C	D	E	Cytokine/Chemokine/Growth Factor Panel 1 (45 plex) Cat. No. EPX450-12171-901

Human ProcartaPlex™ Panels—Additional

Coagulation Panel 1 (6 plex)		
Cat. No. EPX060-10824-901		
Factor XI	Factor XII	Factor XIII
Antithrombin	Protthrombin	CRP

Coagulation Panel 2 (3 plex)		
Cat. No. EPX030-10823-901		
Factor V	Factor VII	Factor VIII

Coagulation Panel 3 (4plex)		
Cat. No. EPX040-10825-901		
Factor IX	Protein S	Protein C
vWF		

Antibody Isotyping Panel (7 plex)		
Cat. No. EPX070-10818-901		
IgA	IgG1	IgG2
IgG3	IgG4	IgE
IgM		

Coming Soon—Human TNF Superfamily Panels

TNF Ligand Panel (15 plex)			
Check website for availability			
APRIL	EDA-1	NGF beta	TNF beta
BAFF	FasL	RANKL	TRAIL
CD30L	GITRL	TL-1 alpha	Tweak
CD40L	Light	TNF alpha	

TNF Receptor Panel (8 plex)			
Check website for availability			
CD30	DR6	TNF-R1	TRAIL-R1
CD40	Fas (APO)	TNF-R2	TRAIL-R2

Mouse ProcartaPlex™ Panels

A	Th1/Th2 Cytokine Panel (11 plex)		
	Cat. No. EPX110-20820-901		
	GM-CSF	IL-4	IL-13
	IFN gamma	IL-5	IL-18
	IL-1 beta	IL-6	TNF alpha
	IL-2	IL-12 p70	

B	Th9/Th17/Th22/Treg Cytokine Panel (6 plex)		
	Cat. No. EPX060-20822-901		
	IL-9	IL-17A	IL-23
	IL-10	IL-22	IL-27

C	Cytokine Panel 1B (10 plex)		
	Cat. No. EPX100-26091-901		
	G-CSF (CSF-3)	IL-31	ENA-78 (CXCL5)
	IFN alpha	IL-1 alpha	M-CSF (CSF-1)
	IL-15/IL-15R	IL-3	
	IL-28	LIF	

D	Chemokine Panel 1 (9 plex)		
	Cat. No. EPX090-20821-901		
	Eotaxin (CCL11)	MCP-1 (CCL2)	MIP-1 beta (CCL4)
	GRO alpha (KC/CXCL1)	MCP-3 (CCL7)	MIP-2 (CXCL2)
	IP-10 (CXCL10)	MIP-1 alpha (CCL3)	RANTES (CCL5)

Mouse Additional ProcartaPlex™ Panels

Essential Th1/Th2 Cytokine Panel (6 plex)		
Cat. No. EPX060-20831-901		
IFN gamma	IL-5	IL-12 p70
IL-4	IL-6	TNF alpha

Myokine Panel (5 plex)		
Cat. No. EPX070-20815-901		
IL-10	IL-15R/IL15R	IL-6
LIF	TNF alpha	

Rat ProcartaPlex™ Panels

A	Th Complete Panel (14 plex)		
	Cat. No. EPX140-30120-901		
	G-CSF (CSF-3)	IL-2	IL-12p70
	GM-CSF	IL-4	IL-13
	IFN gamma	IL-5	IL-17A (CTLA-8)
	IL-1 alpha	IL-6	TNF alpha
	IL-1 beta	IL-10	

B	Chemokine Panel 1 (8 plex)		
	Cat. No. EPX080-30121-901		
	Eotaxin (CCL11)	MCP-1	MIP-2
	GRO alpha (KC/CXCL1)	MCP-3	Rantes
	IP-10	MIP-1 alpha	

Mouse ProcartaPlex™ Panel Combinations

B	D	Th9/Th17/Th22/Treg & Chemokine Panel (15 plex) Cat. No. EPX150-26089-901		
A	B	Th1/Th2/Th9/Th17/Th22/Treg Cytokine Panel (17 plex) Cat. No. EPX170-26087-901		
A	D	Th1/Th2 & Chemokine Panel I (20 plex) Cat. No. EPX200-26090-901		
A	B	D	Cytokine & Chemokine Panel 1 (26 plex) Cat. No. EPX260-26088-901	
A	B	C	D	Cytokine & Chemokine Panel 1A (36 plex) Cat. No. EPX360-26092-901

Mouse Additional ProcartaPlex™ Panels

Antibody Isotyping Panel (7 plex)		
Cat. No. EPX070-20815-901		
IgG1	IgG2a	IgG2b
IgG3	IgA	IgE
IgM		

Antibody Isotyping Panel 2 (7 plex)		
Cat. No. EPX070-20816-901		
IgG1	IgG2b	IgG2c
IgG3	IgA	IgE
IgM		

Mouse IFN alpha/IFN beta (2 plex)		
Cat. No. EPX020-22187-901		
IFN alpha	IFN beta	

Rat ProcartaPlex™ Panel Combination

A	B	Cytokine & Chemokine Panel (22 plex) Cat. No. EPX220-30122-90
----------	----------	--------------------------------------------------------------------------

Rat Additional Panel

Antibody Isotyping Panel (6 plex)		
Cat. No. EPX070-20815-901		
IgG1	IgG2a	IgG2b
IgG2c	IgA	IgM

Non Human Primate ProcartaPlex™ Panels

A	Th Cytokine Panel (14 plex)		
	Cat. No. EPX140-40040-901		
	GM-CSF	IL-5	IL-17A
	IFN gamma	IL-6	IL-18
	IL-1 beta	IL-10	IL-23
	IL-2	IL-12p70	TNF alpha
	IL-4	IL-13	

B	Cytokine Panel 1b (6 plex)		
	Cat. No. EPX060-20822-901		
	CD40L	IFN alpha	IL-15
	G-CSF	IL-1 RA	IL-7

C	Chemokine Panel (10 plex)		
	Cat. No. EPX100-40041-901		
	BLC (CXCL13)	I-TAC (CXCL11)	MIP-1 beta (CCL4)
	Eotaxin (CCL11)	MCP-1 (CCL2)	SDF-1 alpha (CXCL12)
	IL-8 (CXCL8)	MIG (CXCL9)	
	IP-10 (CXCL10)	MIP-1 alpha (CCL3)	

D	Growth Factor Panel (7 plex)		
	Cat. No. EPX070-40043-901		
	BDNF	PDGF-BB	VEGF-D
	NGF beta	SCF	
	FGF-basic	VEGF-A	

Non-Human Primate ProcartaPlex™ Combinations

A	B	C	Cytokine & Chemokine Panel (30 plex)
Cat. No. EPX300-40044-901			

A	B	C	D	Cytokine/Chemokine/Growth Factor Panel (37 plex)
Cat. No. EPX370-40045-901				

Porcine ProcartaPlex™ Panel

Cytokine Panel (9 plex)		
Cat. No. EPX090-60829-901		
IFN alpha	IL-4	IL-10
IFN gamma	IL-6	IL-12 p40
IL-1 beta	IL-8 (CXCL8)	TNF alpha

Canine ProcartaPlex™ Panel

Cytokine/Chemokine/Growth Factor Panel 1 (11 plex)		
Cat. No. EPX110-50511-901		
IFN gamma	IL-8 (CXCL8)	SCF
IL-2	IL-10	TNF alpha
IL-4	IL-12 p40	VEGF-A
IL-6	MCP-1 (CCL2)	

NEW High Sensitivity Assays

Overcome the sensitivity detection limits of conventional multiplex immunoassays with our ProcartaPlex™ High Sensitivity Assays. These assays are designed to measure small concentration differences in cell culture supernatants, plasma, and serum samples with 10-fold lower LLOQs (Lower Limit of Quantification) and sensitivity detection level for all analytes in the femtogram range.

Human High Sensitivity ProcartaPlex™ Panel

Human High Sensitivity Panel (9 plex)		
Cat. No. EPX090-12199-991		
IFN gamma	IL-4	IL-12 p70
IL-1 beta	IL-6	IL-17A (CTLA-8)
IL-2	IL-10	TNF alpha

Mouse High Sensitivity ProcartaPlex™ Panel

Mouse High Sensitivity Panel (5 plex)		
Cat. No. EPX050-22199-991		
IFN gamma	IL-4	TNF alpha
IL-2	IL-6	

Fast track to results with Affymetrix Services

Assay development service

Eliminate the need to troubleshoot and develop your bead-based immunoassay. Our assay development team can save you money, time, and energy for troubleshooting. Benefit from our 20 years of experience and know-how in immunoassay development and validation.

Sample measurement service

No Luminex® instrument available? Save time and money by sending us your samples. Our service team consists of highly skilled and experienced experts who will work with you throughout the stages of your project to ensure delivery of high-quality data and results.

Benefits of using Affymetrix Services

- Obtain reproducible, quantitative data from a small volume
- Eliminate the need for endless troubleshooting
- Receive high quality assay/data reports created by our experts
- Eliminate the need to buy a Luminex instrument
- Free up your time and resources to focus on other projects

1. Hornig M., et. al. Distinct plasma immune signatures in me/cfs are present early in the course of illness. *Science Advances* 1(1):e1400121 (2015).
2. Horing M., et. al., Cytokine network analysis of cerebrospinal fluid in myalgic encephalomyelitis/chronic fatigue syndrome. *Molecular Psychiatry*, 10.1038 (2015)
3. DiCarlo J., et. al., Cytokine and Chemokine Patterns Across 100 Days after Hematopoietic Stem Cell Transplantation in Children, *Biology of Blood and Marrow Transplantation*, 20(3) 361- 369 (2014)
4. Siebert, J.C., et.al., The Stanford Data Miner: a novel approach for integrating and exploring heterogeneous immunological data, *Journal of Translational Medicine*, 10:62 (2012)



eBioscience (US) Tel: +1-888-999-1371 ■ Tel: +1-858-642-2058 ■ eBioscience (EU) Tel: +43 1 796 40 40-305

■ eBioscience (Japan) Tel: +81 (0)3 6430 4020 ■ info@ebioscience.com

www.ebioscience.com Please visit our website for international distributor contact information.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.