

Immunoassays

LEGENDplex™ & ELISA Kits



BioLegend is ISO 13485:2003 Certified

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02-0017-00



World-Class Quality | Superior Customer Support | Outstanding Value

Enabling Legendary Discovery

BioLegend's mission is to accelerate scientific discovery by providing high quality research products at an outstanding value. Our thoroughly validated immunoassays quantify cytokines, chemokines, and soluble biomarkers with legendary sensitivity, precision, and accuracy. With a portfolio that ranges from our LEGENDplex™ multiplex panels to coated and uncoated ELISA kits and sets, BioLegend's immunoassays deliver reliable results quickly, easily, and consistently.

Everyday our research partners work to make discoveries happen in cancer therapy, neuroscience, and immunology. Our 100% satisfaction guarantee provides them with peace of mind, so that they can be confident in their results every time. Their success is our success, and we proudly stand next to them on their path to legendary discovery.

LEGENDplex™ Multi-Analyte Flow Assay Kits

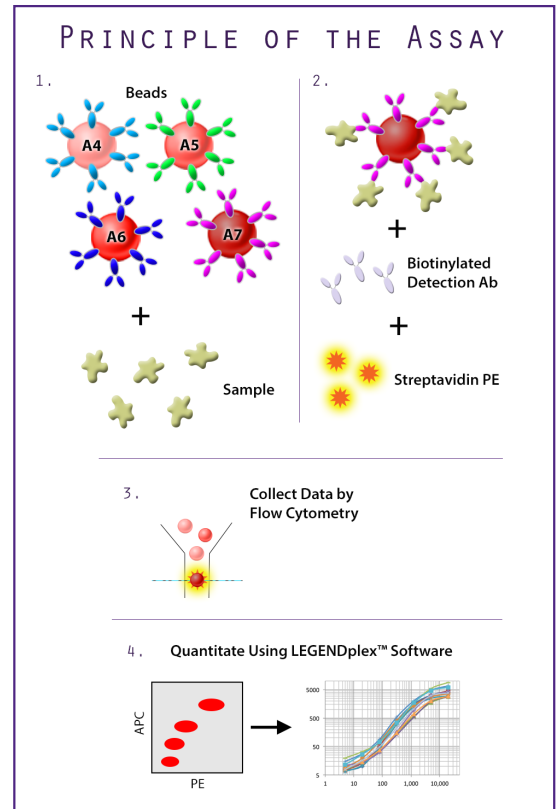
LEGENDplex™ bead-based immunoassays quantitate up to 13 targets simultaneously from one small sample volume. These assays are based on the same scientific principle as sandwich ELISAs:

Capture beads, which are differentiated by size and internal APC fluorescence intensity, are conjugated to antibodies specific to a given biomarker target.

Panels of defined capture bead sets are then incubated with biological samples, next a biotinylated detection antibody cocktail is added to form bead-analyte-detection antibody sandwiches.

A streptavidin-PE conjugate is added to bind to the biotinylated detection antibodies, providing a fluorescent signal intensity proportional to the amount of bound analyte.

The PE fluorescence of analyte specific bead regions are quantified using flow cytometry and the concentrations of biomarker targets are determined using the LEGENDplex™ data analysis software.



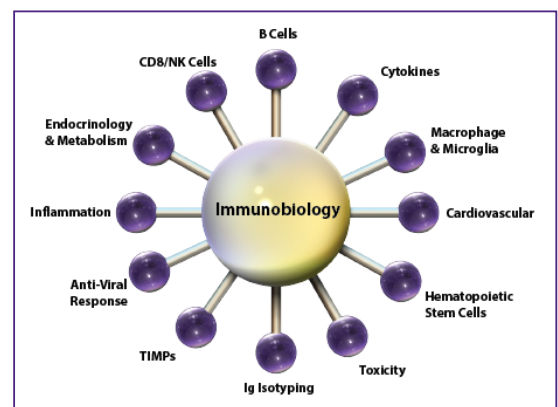
LEGENDplex™ Applications

BioLegend has developed LEGENDplex™ panels for use in a wide variety of research fields in the scientific community.

Each LEGENDplex™ panel is specifically designed to quantitate biomarker targets that are central to a given biological process or disease state.

Assays are available in human, non-human primate (NHP), mouse, and rat specificities. Additionally, we are constantly expanding our catalog with new assay content.

To stay updated on these releases, visit: biolegend.com/legendplex



LEGENDplex™ Features & Specifications

LEGENDplex™ assays are compatible with all flow cytometers capable of detecting PE and APC fluorescence, or PE and PerCP in the case of instruments without a red laser.

In addition, free data analysis software is available with the purchase of any assay.

Features	
No. Analytes per assay	1 to 13
Min. volume	12.5 μ L serum/plasma 25 μ L TC supernatants
Cytometer Requirements	PE & APC detection (PerCP/FL3 without red laser)
Analysis Software	Free PC & Mac versions with assay purchase
Tests/Assay	100 tests

Pre-defined Panels

The pre-defined panels provide all the reagents you'll need to run LEGENDplex™, including the setup beads, capture beads, matrix, detection antibody mix, standard cocktail, buffers, assay plate and plate sealers.

Mix and Match Assays

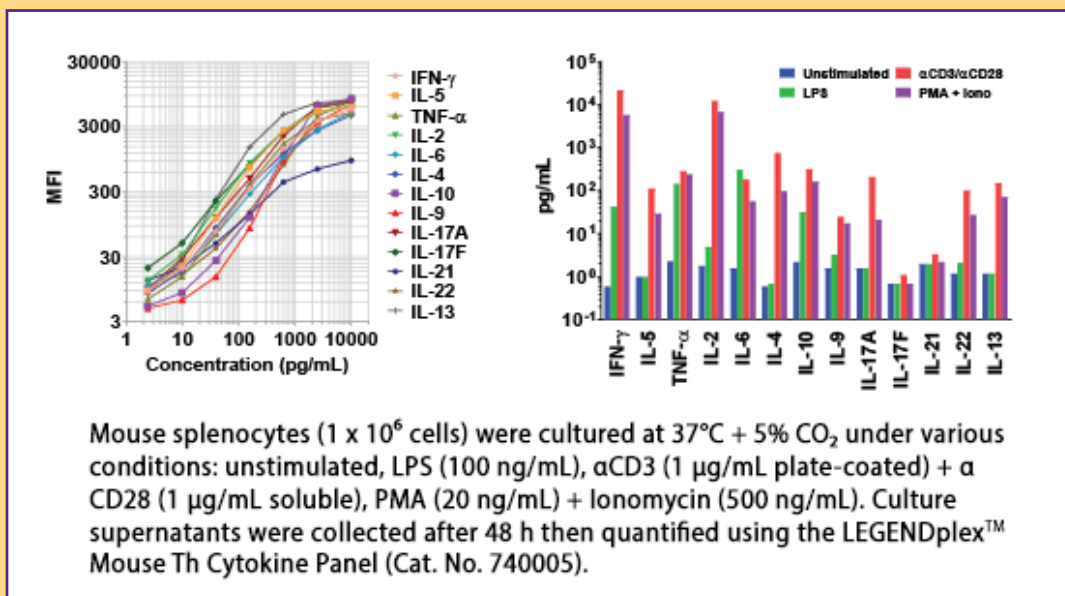
Use the LEGENDplex™ Mix and Match System to order a subset of analyte targets within a pre-defined panel. In order to use this system, you will need to order your desired capture beads, the appropriate buffer set, standard cocktail, detection antibody mix, and assay plate format (filter or V-bottom).

Custom LEGENDplex™ Panels

Want a LEGENDplex™ target that you don't see in our listings? Or, do you want to combine cytokines and chemokines from across multiple panels? Talk things over with our experts to get your customized project underway.

E-mail: cst@biolegend.com or call 877-BIOLEGEND to get started!

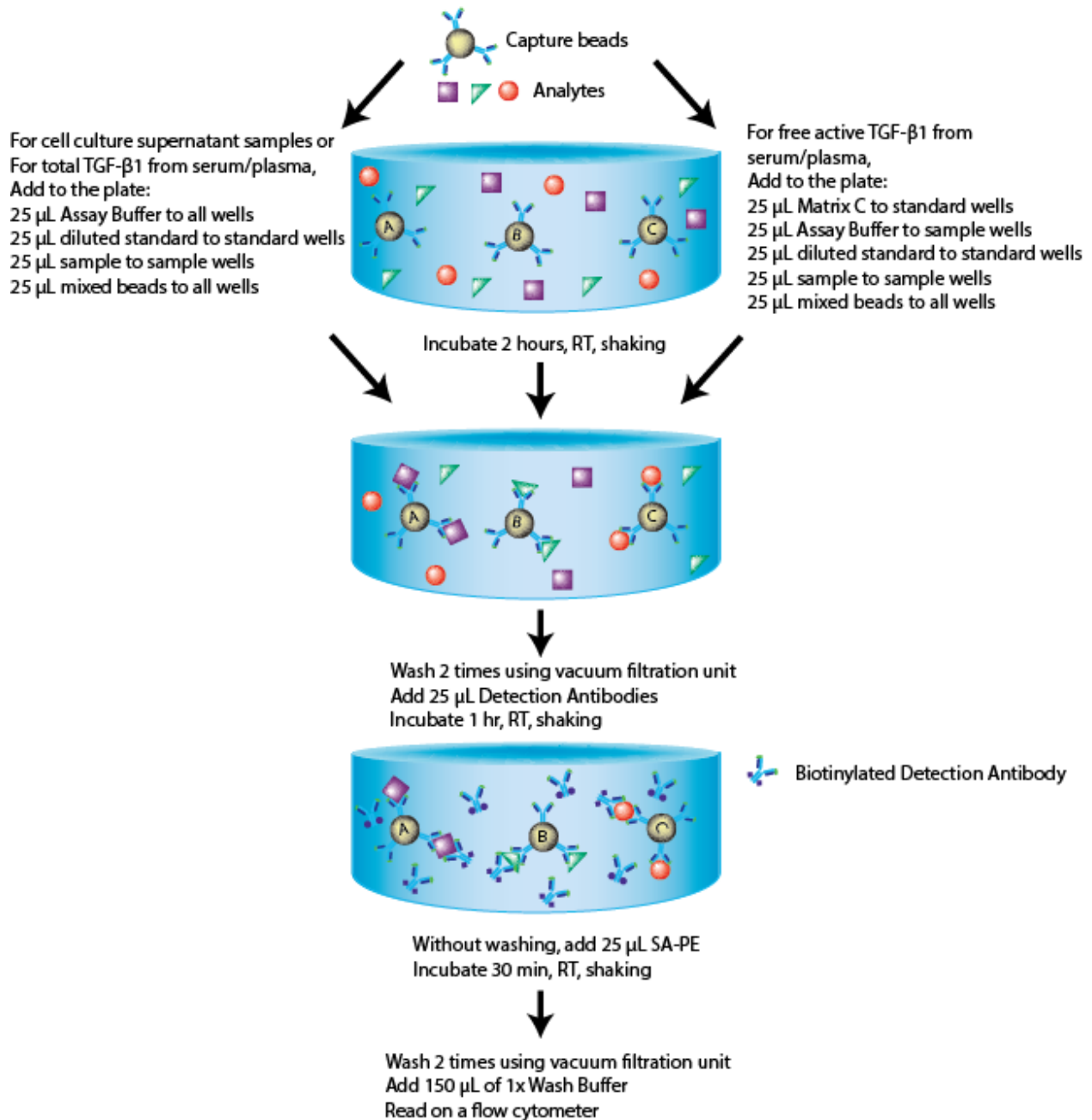
Example Data



Assay Procedure Summary for Filter Plate

Add 100 μ L 1X Wash Buffer to filter plate wells

Vacuum to remove excess buffer



To view a detailed LEGENDplex™ assay protocol on JoVE, visit: [jove.com/video/56440](https://www.jove.com/video/56440)

Human Panels

Human T Helper Cytokine Panels

Pre-defined Panels include ALL required components and ALL check-marked targets										Mix & Match Capture Beads Cat. No.
Filter Plate		Cat. No. 740721	Cat. No. 740723	Cat. No. 740725	Cat. No. 740729	Cat. No. 740727	Cat. No. 740731	Cat. No. 740733	Cat. No. 740735	
V-bottom Plate		Cat. No. 740722	Cat. No. 740724	Cat. No. 740726	Cat. No. 740730	Cat. No. 740728	Cat. No. 740732	Cat. No. 740734	Cat. No. 740736	
Target	Bead ID	Th	Th1	Th2	Th1/Th2	Th17	Th9	Th22	Tfh	
IFN- γ	B2	✓	✓		✓	✓				740052
IL-2	A6	✓	✓		✓					740717
IL-4	B6	✓		✓	✓					740042
IL-5	A4	✓		✓	✓					740043
IL-6	A7	✓	✓	✓	✓	✓		✓	✓	740044
IL-9	A8	✓					✓			740045
IL-10	A10	✓	✓	✓	✓	✓	✓	✓	✓	740046
IL-13	A5	✓		✓	✓					740047
IL-17A	B4	✓				✓				740546
IL-17F	B5	✓				✓				740718
IL-21	B7	✓				✓			✓	740719
IL-22	B9	✓				✓		✓		740720
TNF- α	B3	✓	✓	✓	✓	✓	✓	✓	✓	740053
Required Mix and Match Components (already included in Pre-defined Panels)										
Standard									Cat. No. 740759	
Detection Antibodies									Cat. No. 740758	
Buffer Set									Cat. No. 740368	
Plate Options									Filter Plate: Cat. No. 740377 V-bottom Plate: Cat. No. 740379	

Human Cytokine Panel 2

(Includes Filter Plate)

Pre-defined Panel Cat. No. 740102: Includes all 13 Capture Beads and all required components		Mix & Match Capture Beads Cat. No.
Target	Bead ID	
GM-CSF	A7	740106
IFN- α	A8	740107
IL-1 α	A5	740104
IL-1 β	A6	740105
IL-11	B6	740113
IL-12 (p40)	B2	740109
IL-12 (p70)	B3	740110
IL-15	B4	740111
IL-18	B5	740112
IL-23	A10	740108
IL-27	B7	740114
IL-33	B9	740115
TSLP	A4	740103
Required Mix and Match Components (already included in Pre-defined Panel)		
Standard		Cat. No. 740117
Detection Antibodies		Cat. No. 740116
Buffer Set (includes Filter Plate)		Cat. No. 740075

Human Proinflammatory Chemokine Panel

(Includes Filter Plate)

Pre-defined Panel Cat. No. 740003: includes all 13 Capture Beads and all required components		Mix & Match Capture Beads Cat. No.
Target	Bead ID	
CCL2 (MCP-1)	A8	740076
CCL3 (MIP-1 α)	B2	740077
CCL4 (MIP-1 β)	B9	740078
CCL5 (RANTES)	A10	740079
CCL11 (Eotaxin)	A6	740080
CCL17 (TARC)	A7	740081
CCL20 (MIP-3 α)	B5	740082
CXCL1 (GRO α)	B6	740083
CXCL5 (ENA-78)	B4	740084
CXCL8 (IL-8)	A4	740085
CXCL9 (MIG)	B3	740086
CXCL10 (IP-10)	A5	740087
CXCL11 (I-TAC)	B7	740088
Required Mix and Match Components (already included in Pre-defined Panel)		
Standard		Cat. No. 740398
Detection Antibodies		Cat. No. 740072
Buffer Set (includes Filter Plate)		Cat. No. 740075



Human Panels

Human Adipokine Panel* (Includes Filter Plate)

Pre-defined Panel Cat. No. 740196: includes all 13 Capture Beads and all required components		Mix & Match Capture Beads Cat. No.
Target	Bead ID	
Adiponectin	A4	740197
Adipsin	A5	740198
CCL2 (MCP-1)	A7	740200
CXCL10 (IP-10)	A10	740202
IFN- γ	B6	740207
IL-1 β	A8	740201
IL-6	B5	740206
IL-8	B3	740204
IL-10	B2	740203
Leptin	B4	740205
RBP4	A6	740199
Resistin	B7	740208
TNF- α	B9	740209
Required Mix and Match Components (already included in Pre-defined Panel)		
Standard		Cat. No. 740210
Detection Antibodies		Cat. No. 740211
Buffer Set 3 (includes Filter Plate)		Cat. No. 740215

*The Human Adipokine panel is not suitable for serum/plasma samples due to different sample dilution requirements for different analytes. If you need to measure serum/plasma samples for these analytes, please use Human Metabolic Panel 1 and Human Inflammation panel.

Human CD8/NK Cell Panel (Includes Filter Plate)

Pre-defined Panel Cat. No. 740267: includes all 13 Capture Beads and all required components		Mix & Match Capture Bead Cat. No.
Target	Bead ID	
Granulysin	B9	740280
Granzyme A	B5	740277
Granzyme B	B6	740278
sFas	B2	740274
sFasL	B3	740275
IFN- γ	B4	740276
IL-2	A4	740268
IL-4	A5	740269
IL-6	A7	740044
IL-10	A6	740270
IL-17A	A8	740272
Perforin	B7	740279
TNF- α	A10	740273
Required Mix and Match Components (already included in Pre-defined Panel)		
Standard		Cat. No. 740281
Detection Antibodies		Cat. No. 740282
Buffer Set (includes Filter Plate)		Cat. No. 740075

Human/NHP Free Active/Total TGF- β 1 Panel*

Pre-defined Panels include all Capture Beads and all required components		Mix & Match Capture Bead Cat. No.
Filter Plate	Cat. No. 740449	
V-bottom Plate	Cat. No. 740450	
Target	Bead ID	
TGF- β 1	A6	740488
Required Mix and Match Components (already included in Pre-defined Panel)		
Standard		Cat. No. 740486
Detection Antibodies		Cat. No. 740487
Buffer Set E		Cat. No. 740437
Plate Options		Filter Plate: Cat. No. 740377
		V-bottom Plate: Cat. No. 740379

*The assay is able to detect free active TGF- β 1 without sample treatment or total TGF- β 1 after sample treatment

Human Metabolic Panel 1 (Includes Filter Plate)

Pre-defined Panel Cat. No. 740212: includes all 4 Capture Beads and all required components		Mix & Match Capture Bead Cat. No.
Target	Bead ID	
Adiponectin	A4	740197
Adipsin	A5	740198
Leptin	B4	740205
Resistin	B7	740208
Required Mix and Match Components (already included in Pre-defined Panel)		
Standard		Cat. No. 740213
Detection Antibodies		Cat. No. 740214
Buffer Set 4 (includes Filter Plate)		Cat. No. 740216

Human Anti-Virus Response Panel

Pre-defined Panels include all Capture Beads and all required components				Mix & Match Capture Bead Cat. No.
Filter Plate		Cat. No. 740349	Cat. No. 740350	
V-bottom Plate		Cat. No. 740390	Cat. No. 740396	
Target	Bead ID	Anti-Virus Response Panel	Type 1/2/3 Interferon Panel	
CXCL10 (IP-10)	A7	✓		740363
GM-CSF	B5	✓		740362
IFN- α 2	B3	✓	✓	740351
IFN- β	B6	✓	✓	740353
IFN- γ	B9	✓	✓	740352
IFN- λ 1	A8	✓	✓	740354
IFN- λ 2/3	B4	✓	✓	740355
IL-1 β	A4	✓		740119
IL-6	A5	✓		740356
IL-8	A10	✓		740357
IL-10	B7	✓		740358
IL-12 (p70)	B2	✓		740361
TNF- α	A6	✓		740359
Required Mix and Match Components (already included in Pre-defined Panel)				
Standard				Cat. No. 740365
Detection Antibodies				Cat. No. 740364
Buffer Set A				Cat. No. 740368
Plate Options				Filter Plate: Cat. No. 740377
				V-bottom Plate: Cat. No. 740379

Human Apolipoprotein (Apo) Panel

Pre-defined Panels include all Capture Beads and all required components		Mix & Match Capture Bead Cat. No.
Filter Plate	Cat. No. 740453	
V-bottom Plate	Cat. No. 740454	
Target	Bead ID	
Apo A1	A4	740457
Apo A11	A5	740458
Apo B100	A6	740459
Apo C11	A7	740460
Apo C111	A10	740461
Apo D	B3	740462
Apo E	B4	740463
Apo E4	B5	740464
Apo H	B6	740465
Apo J	B7	740466
Apo M	B9	740467
Required Mix and Match Components (already included in Pre-defined Panel)		
Standard		Cat. No. 740455
Detection Antibodies		Cat. No. 740456
Buffer Set D		Cat. No. 740375
Plate Options		Filter Plate: Cat. No. 740377
		V-bottom Plate: Cat. No. 740379

Human Inflammation Panel (Includes Filter Plate)

Pre-defined Panel Cat. No. 740118: Includes all 13 Capture Beads and all required components		Mix & Match Capture Beads Cat. No.
Target	Bead ID	
CCL2 (MCP-1)	A8	740076
IFN- α	A5	740120
IFN- γ	A6	740121
IL-1 β	A4	740119
IL-6	A10	740124
IL-8	B2	740125
IL-10	B3	740126
IL-12 (p70)	B4	740127
IL-17A	B5	740128
IL-18	B6	740129
IL-23	B7	740130
IL-33	B9	740115
TNF- α	A7	740122
Required Mix and Match Components (already included in Pre-defined Panel)		
Standard		Cat. No. 740400
Detection Antibodies		Cat. No. 740132
Buffer Set (includes Filter Plate)		Cat. No. 740075

Human Growth Factor Panel (Includes Filter Plate)

Pre-defined Panel Cat. No. 740180: Includes all 13 Capture Beads and all required components		Mix & Match Capture Beads Cat. No.
Target	Bead ID	
Angiopoietin-2	A4	740181
EGF	A5	740182
EPO	A6	740183
FGF-basic	A7	740184
G-CSF	A8	740185
GM-CSF	A10	740186
HGF	B2	740187
M-CSF	B3	740188
PDGF-AA	B4	740189
PDGF-BB	B5	740190
SCF	B6	740191
TGF- α	B7	740192
VEGF	B9	740193
Required Mix and Match Components (already included in Pre-defined Panel)		
Standard		Cat. No. 740194
Detection Antibodies		Cat. No. 740195
Buffer Set (includes Filter Plate)		Cat. No. 740075

Human Immunoglobulin Isotyping Panel

Pre-defined Panels include ALL required components and ALL check-marked targets							Mix & Match Capture Bead Cat. No.
Filter Plate		Cat. No. 740637	Cat. No. 740639	Cat. No. 740714	Cat. No. 740641	Cat. No. 740508	
V-bottom Plate		Cat. No. 740638	Cat. No. 740640	Cat. No. 740715	Cat. No. 740642	Cat. No. 740509	
Target	Bead ID	8-plex	6-plex	IgGs	IgE	IgD	
IgA	B4	✓	✓				740652
IgD	B6	✓				✓	740654
IgE	A7	✓			✓		740650
IgG1	A4	✓	✓	✓			740647
IgG2	A5	✓	✓	✓			740648
IgG3	A6	✓	✓	✓			740649
IgG4	B3	✓	✓	✓			740651
IgM	B5	✓	✓				740653
Required Mix and Match Components (already included in Pre-defined Panel)							
Standard						Cat. No. 740646	
Detection Antibodies						Cat. No. 740645	
Buffer Set A1						Cat. No. 740525	
Plate Options						Filter Plate: Cat. No. 740377	
						V-bottom Plate: Cat. No. 740379	



Human Panels

Human TIMP Panel

Pre-defined Panels include all Capture Beads and all required components				Mix & Match Capture Bead Cat. No.
Filter Plate		Cat. No. 740479		
V-bottom Plate		Cat. No. 740480		
Target	Bead ID			
TIMP-1	B9			740483
TIMP-2	B7			740484
TIMP-3	A5			740485
Required Mix and Match Components (already included in Pre-defined Panel)				
Standard				Cat. No. 740841
Detection Antibodies				Cat. No. 740842
Buffer Set C				Cat. No. 740374
Plate Options				Filter Plate: Cat. No. 740377
				V-bottom Plate: Cat. No. 740379

Human IGFBP Panel

Pre-defined Panels include all Capture Beads and all required components				Mix & Match Capture Bead Cat. No.
Filter Plate		Cat. No. 740468		
V-bottom Plate		Cat. No. 740469		
Target	Bead ID			
IGFALS	B9			740478
IGFBP-1	B5			740477
IGFBP-2	B2			740475
IGFBP-3	A5			740473
IGFBP-4	B4			740476
IGFBP-6	A8			740474
IGFBP-7	A4			740472
Required Mix and Match Components (already included in Pre-defined Panel)				
Standard				Cat. No. 740470
Detection Antibodies				Cat. No. 740471
Buffer Set C				Cat. No. 740374
Plate Options				Filter Plate: Cat. No. 740377
				V-bottom Plate: Cat. No. 740379

Human Bone Metabolism Panel 1

Pre-defined Panels include all Capture Beads and all required components					Mix & Match Capture Bead Cat. No.
Filter Plate		Cat. No. 740655	Cat. No. 740674	Cat. No. 740672	
V-bottom Plate		Cat. No. 740656	Cat. No. 740675	Cat. No. 740672	
Target	Bead ID	Bone Metabolism	Bone Resorption	Bone Formation	
ACPS	B6	✓	✓		740664
ALPL	B3	✓		✓	740663
BMP-2	B7	✓		✓	740670
DKK-1	B2	✓	✓		740671
IL-1β	A10	✓	✓		740669
IL-6	A4	✓	✓		740667
Leptin	B9	✓		✓	740665
OPG	A7	✓		✓	740660
OPN	B5	✓	✓		740661
PTH	A5	✓	✓		740668
RANKL	A8	✓	✓		740666
TNF-α	B4	✓	✓		740053
Required Mix and Match Components (already included in Pre-defined Panel)					
Standard					Cat. No. 740658
Detection Antibodies					Cat. No. 740650
Buffer Set A					Cat. No. 740657
Plate Options					Filter Plate: Cat. No. 740377
					V-bottom Plate: Cat. No. 740379

Human Kidney Function Panel 1, For Urine Samples

Pre-defined Panels include all Capture Beads and all required components				Mix & Match Capture Bead Cat. No.
Filter Plate		Cat. No. 740577		
V-bottom Plate		Cat. No. 740578		
Target	Bead ID			
Albumin	B3			740571
Clusterin	A7			740569
Cystatin C	A6			740568
EGF	A8			740570
IGFBP-7	A4			740472
OPN	B4			740572
TFF3	B7			740573
Uromodulin	B9			740574
β2-microglobulin	A5			740567
Required Mix and Match Components (already included in Pre-defined Panel)				
Standard				Cat. No. 740580
Detection Antibodies				Cat. No. 740579
Buffer Set G				Cat. No. 740539
Plate Options				Filter Plate: Cat. No. 740377
				V-bottom Plate: Cat. No. 740379

Human Kidney Function Panel 2, For Serum/Plasma Samples

Pre-defined Panels include all Capture Beads and all required components				Mix & Match Capture Bead Cat. No.
Filter Plate		Cat. No. 740581		
V-bottom Plate		Cat. No. 740582		
Target	Bead ID			
Cystatin C	A6			740568
IGFBP-7	A4			740472
NGAL	A5			740575
OPN	B4			740572
TFF3	B7			740573
TIMP-2	A8			740576
Uromodulin	B9			740574
Required Mix and Match Components (already included in Pre-defined Panel)				
Standard				Cat. No. 740584
Detection Antibodies				Cat. No. 740583
Buffer Set G				Cat. No. 740539
Plate Options				Filter Plate: Cat. No. 740377
				V-bottom Plate: Cat. No. 740379

Human Kidney Function Panel 3, For Urine/Plasma/Serum Samples

Pre-defined Panels include all Capture Beads and all required components				Mix & Match Capture Bead Cat. No.
Filter Plate		Cat. No. 740585		
V-bottom Plate		Cat. No. 740586		
Target	Bead ID			
Cystatin C	A6			740568
IGFBP-7	A4			740472
OPN	B4			740572
TFF3	B7			740573
Uromodulin	B9			740574
Required Mix and Match Components (already included in Pre-defined Panel)				
Standard				Cat. No. 740588
Detection Antibodies				Cat. No. 740587
Buffer Set G				Cat. No. 740539
Plate Options				Filter Plate: Cat. No. 740377
				V-bottom Plate: Cat. No. 740379

Human B Cell Panels

Pre-defined Panels include ALL required components and ALL check-marked targets							Mix & Match Capture Bead Cat. No.
Filter Plate		Cat. No. 740526	Cat. No. 740528	Cat. No. 740530	Cat. No. 740532	Cat. No. 740534	
V-bottom Plate		Cat. No. 740527	Cat. No. 740529	Cat. No. 740531	Cat. No. 740533	Cat. No. 740535	
Target	Bead ID	B Cell	B Effector 1 (Be1)	B Effector 2 (Be2)	B Effector 1/2 (Be1/2)	B Cell Activator	
APRIL	B6	✓				✓	740548
BAFF	B7	✓				✓	740549
CD40L	B9	✓				✓	740550
IFN-γ	B3	✓	✓		✓		740545
IL-2	A10	✓		✓	✓		740543
IL-4	A6	✓		✓	✓		740540
IL-6	A8	✓		✓	✓		740542
IL-10	A7	✓					740541
IL-12p70	B5	✓	✓		✓		740547
IL-13	A5	✓		✓	✓		740047
IL-17A	B4	✓			✓		740546
TNF-α	A4	✓	✓	✓	✓		740538
TNF-β	B2	✓	✓		✓		740544
Required Mix and Match Components (already included in Pre-defined Panel)							
Standard						Cat. No. 740537	
Detection Antibodies						Cat. No. 740536	
Buffer Set A1						Cat. No. 740525	
Plate Options						Filter Plate: Cat. No. 740377	
						V-bottom Plate: Cat. No. 740379	

Human Vascular Inflammation Panel 1

Pre-defined Panels include ALL required components and ALL check-marked targets							Mix & Match Capture Bead Cat. No.
Filter Plate		Cat. No. 740551	Cat. No. 740589	Cat. No. 740591	Cat. No. 740593	Cat. No. 740595	
V-bottom Plate		Cat. No. 740552	Cat. No. 740590	Cat. No. 740592	Cat. No. 740594	Cat. No. 740596	
Target	Bead ID	Tissue Culture	Serum/Plasma	CRP	Urine	Urine	
CRP	A7	✓		✓	✓		740558
Cystatin C	B9	✓	✓			✓	740566
ICAM-1	B5	✓	✓		✓		740563
IGFBP-4	B4	✓	✓		✓		740476
MMP-2	A8	✓	✓		✓		740559
MMP-9	B7	✓	✓		✓		740565
MPO	B2	✓	✓		✓		740561
MRP8/14	A5	✓	✓			✓	740556
Myoglobin	A4	✓	✓		✓		740555
NGAL	A6	✓	✓		✓		740557
OPN	A10	✓	✓			✓	740560
SAA	B3	✓	✓		✓		740562
VCAM-1	B6	✓	✓		✓		740564
Required Mix and Match Components (already included in Pre-defined Panel)							
Standard						Cat. No. 740554	
Detection Antibodies						Cat. No. 740553	
Buffer Set C						Cat. No. 740374	
Plate Options						Filter Plate: Cat. No. 740377	
						V-bottom Plate: Cat. No. 740379	



Human Panels

Human Macrophage/Microglia Panels

Pre-defined Panels include ALL required components and ALL check-marked targets						Mix & Match Capture Bead Cat. No.
Filter Plate		Cat. No. 740502	Cat. No. 740504	Cat. No. 740506	Cat. No. 740508	
V-bottom Plate		Cat. No. 740503	Cat. No. 740505	Cat. No. 740507	Cat. No. 740509	
Target	Bead ID	Macrophage/Microglia	M1 Macrophage	M2 Macrophage	M1/M2 Macrophage	
Arginase	B2	✓		✓		740518
CCL17 (TARC)	B3	✓		✓	✓	740519
CXCL10 (IP-10)	B9	✓	✓		✓	740524
IFN-γ	B7	✓	✓			740523
IL-1RA	B4	✓		✓	✓	740520
IL-1β	A10	✓	✓		✓	740517
IL-4	A7	✓		✓		740515
IL-6	A6	✓	✓	✓	✓	740514
IL-10	A8	✓		✓	✓	740516
IL-12p40	B5	✓	✓		✓	740521
IL-12p70	A4	✓	✓		✓	740512
IL-23	B6	✓	✓		✓	740522
TNF-α	A5	✓	✓		✓	740513
Required Mix and Match Components (already included in Pre-defined Panel)						
Standard					Cat. No. 740511	
Detection Antibodies					Cat. No. 740510	
Buffer Set A1					Cat. No. 740525	
Plate Options					Filter Plate: Cat. No. 740377	
					V-bottom Plate: Cat. No. 740379	

Human Hematopoietic Stem Cell Panel

Pre-defined Panels include ALL required components and ALL check-marked targets						Mix & Match Capture Bead Cat. No.
Filter Plate		Cat. No. 740610	Cat. No. 740612	Cat. No. 740614	Cat. No. 740616	
V-bottom Plate		Cat. No. 740611	Cat. No. 740613	Cat. No. 740615	Cat. No. 740617	
Target	Bead ID	HSC	HSC Lymphoid	HSC Erythroid	HSC Myeloid	
CXCL12	B5	✓	✓	✓	✓	740606
FLT3L	A5	✓	✓		✓	740598
GM-CSF	A6	✓		✓	✓	740599
IL-3	A8	✓	✓	✓	✓	740601
IL-6	A4	✓	✓	✓		740597
IL-7	B9	✓	✓			740609
IL-11	B2	✓	✓	✓		740603
IL-15	B6	✓	✓			740607
IL-34	A10	✓			✓	740602
LIF	B4	✓	✓			740605
M-CSF	B7	✓			✓	740608
SCF	B3	✓	✓	✓	✓	740604
Required Mix and Match Components (already included in Pre-defined Panel)						
Standard					Cat. No. 740619	
Detection Antibodies					Cat. No. 740618	
Buffer Set A1					Cat. No. 740620	
Plate Options					Filter Plate: Cat. No. 740377	
					V-bottom Plate: Cat. No. 740379	



Mouse Panels

Mouse T Helper Cytokine Panels *(Includes Filter Plate; V-bottom plate version coming soon)*

Pre-defined Panels include ALL required components and ALL check-marked targets										Mix & Match Capture Beads Cat. No.
Cat. No.	Bead ID	Cat. No. 740005	Cat. No. 740025	Cat. No. 740027	Cat. No. 740029	Cat. No. 740031	Cat. No. 740035	Cat. No. 740037	Cat. No. 740039	
Target	Bead ID	Th	Th1	Th2	Th1/Th2	Th17	Th9	Th22	Tfh	
IFN- γ	A4	✓	✓		✓	✓				740065
IL-2	A7	✓	✓		✓					740054
IL-4	A10	✓		✓	✓					740055
IL-5	A5	✓		✓	✓					740056
IL-6	A8	✓	✓	✓	✓	✓		✓	✓	740057
IL-9	B3	✓						✓		740058
IL-10	B2	✓	✓	✓	✓	✓		✓	✓	740059
IL-13	B9	✓		✓	✓					740060
IL-17A	B4	✓				✓				740061
IL-17F	B5	✓				✓				740062
IL-21	B6	✓				✓			✓	740063
IL-22	B7	✓				✓		✓		740064
TNF- α	A6	✓	✓	✓	✓	✓	✓	✓	✓	740066
Required Mix and Match Components (already included in Pre-defined Panel)										
Standard									Cat. No. 740369	
Detection Antibodies									Cat. No. 740073	
Buffer Set (includes Filter Plate)									Cat. No. 740075	

Mouse Cytokine Panel 2 *(Includes Filter Plate)*

Pre-defined Panel Cat. No. 740134: Includes all 13 Capture Beads and all required components		Mix & Match Capture Beads Cat. No.
Target	Bead ID	
GM-CSF	B7	740146
IFN- β	B6	740145
IL-1 α	A4	740135
IL-1 β	A5	740136
IL-3	A6	740137
IL-7	B2	740141
IL-11	B3	740142
IL-12 (p40)	A7	740138
IL-12 (p70)	A8	740139
IL-23	A10	740140
IL-27	B4	740143
IL-33	B5	740144
TSLP	B9	740147
Required Mix and Match Components (already included in Pre-defined Panel)		
Standard		Cat. No. 740372
Detection Antibodies		Cat. No. 740149
Buffer Set 2 (includes Filter Plate)		Cat. No. 740166

Mouse Proinflammatory Chemokine *(Includes Filter Plate)*

Pre-defined Panel Cat. No. 740007: Includes all 13 Capture Beads and all required components		Mix & Match Capture Beads Cat. No.
Target	Bead ID	
CCL2 (MCP-1)	A10	740089
CCL3 (MIP-1 α)	B4	740090
CCL4 (MIP-1 β)	B5	740091
CCL5 (RANTES)	A4	740092
CCL11 (Eotaxin)	A6	740093
CCL17 (TARC)	A7	740094
CCL20 (MIP-3 α)	A5	740095
CCL22 (MDC)	B9	740098
CXCL1 (KC)	A8	740096
CXCL5 (LIX)	B7	740097
CXCL9 (MIG)	B2	740099
CXCL10 (IP-10)	B3	740100
CXCL13 (BLC)	B6	740101
Required Mix and Match Components (already included in Pre-defined Panel)		
Standard		Cat. No. 740370
Detection Antibodies		Cat. No. 740074
Buffer Set (includes Filter Plate)		Cat. No. 740075

Mouse Hematopoietic Stem Cell Panel

Pre-defined Panels include ALL required components and ALL check-marked targets						Mix & Match Capture Beads Cat. No.
Filter Plate		Cat. No. 740676	Cat. No. 740678	Cat. No. 740680	Cat. No. 740682	
V-bottom Plate		Cat. No. 740677	Cat. No. 740679	Cat. No. 740681	Cat. No. 740683	
Target	Bead ID	HSC	HSC Lymphoid	HSC Erythroid	HSC Myeloid	
CXCL12 (SDF-1)	B9	✓	✓	✓	✓	740696
EPO	B7	✓		✓		740695
GM-CSF	A10	✓		✓	✓	740689
IL-3	B4	✓	✓			740691
IL-5	A5	✓			✓	740056
IL-6	A8	✓	✓	✓		740057
IL-15	B2	✓	✓			740690
IL-34	A4	✓			✓	740686
LIF	B5	✓	✓			740693
M-CSF	A6	✓			✓	740687
SCF	B6	✓	✓	✓	✓	740694
TGF- β 1	B3	✓	✓	✓	✓	740692
TPO	A7	✓		✓		740688
Required Mix and Match Components (already included in Pre-defined Panel)						
Standard					Cat. No. 740684	
Detection Antibodies					Cat. No. 740685	
Buffer Set A1					Cat. No. 740620	
Plate Options					Filter Plate: Cat. No. 740377	
					V-bottom Plate: Cat. No. 740379	

Mouse Panels

Mouse Inflammation Panel

Pre-defined Panel includes either V-bottom (Cat. No. 740446) or Filter Plate (Cat. No. 740150), all 13 Capture Beads, and all required components		Mix & Match Capture Beads Cat. No.
Target	Bead ID	
CCL2 (MCP-1)	A8	740155
GM-CSF	B9	740163
IFN-β	B7	740162
IFN-γ	A6	740153
IL-1α	A5	740152
IL-1β	B2	740157
IL-6	B4	740159
IL-10	B3	740158
IL-12 (p70)	A10	740156
IL-17A	B6	740161
IL-23	A4	740151
IL-27	B5	740160
TNF-α	A7	740154
Required Mix and Match Components (already included in Pre-defined Panel)		
Standard		Cat. No. 740371
Detection Antibodies		Cat. No. 740165
Buffer Set B		Cat. No. 740373
Plate Options		Filter Plate: Cat. No. 740377
		V-bottom Plate: Cat. No. 740379

Mouse Immunoglobulin Isotyping Panel

Pre-defined Panel includes either V-bottom (Cat. No. 740490) or Filter Plate (Cat. No. 740489), 1 Capture Bead, and all required components		Mix & Match Capture Beads Cat. No.
Target	Bead ID	
IgA	B2	740500
IgG1	A4	740496
IgG2a	A5	740497
IgG2b	B4	740498
IgG3	A7	740499
IgM	B3	740501
Required Mix and Match Components (already included in Pre-defined Panel)		
Standard		Cat. No. 740494
Detection Antibodies		Cat. No. 740495
Buffer Set D		Cat. No. 740375
Plate Options		Filter Plate: Cat. No. 740377
		V-bottom Plate: Cat. No. 740379

Mouse/Rat Free Active/Total TGF-β1 Panel*

Pre-defined Panel includes either V-bottom (Cat. No. 740490) or Filter Plate (Cat. No. 740489), 1 Capture Bead, and all required components		Mix & Match Capture Beads Cat. No.
Target	Bead ID	
TGF-β1	A6	740488
Required Mix and Match Components (already included in Pre-defined Panel)		
Standard		Cat. No. 740486
Detection Antibodies		Cat. No. 740487
Buffer Set F		Cat. No. 740491
Plate Options		Filter Plate: Cat. No. 740377
		V-bottom Plate: Cat. No. 740379

* The assay is able to detect free active TGF-β1 without sample treatment or total TGF-β1 after sample treatment.

Mouse Anti-Virus Response Panel

Pre-defined Panels include all Capture Beads and all required components				Mix & Match Capture Bead Cat. No.
Filter Plate		Cat. No. 740349	Cat. No. 740350	
V-bottom Plate		Cat. No. 740390	Cat. No. 740396	
Target	Bead ID	Anti-Virus Response Panel	Type 1/2/3 Interferon Panel	
CCL2 (MCP-1)	A7	✓		740627
CCL5 (RANTES)	A10	✓		740628
CXCL1 (KC)	A5	✓		740626
CXCL10 (IP-10)	B3	✓		740630
GM-CSF	B4	✓		740631
IFN-α	B7	✓	✓	740633
IFN-β	B6	✓	✓	740145
IFN-γ	A4	✓	✓	740065
IL-1β	B2	✓		740157
IL-6	B9	✓		740634
IL-10	B5	✓		740632
IL-12p70	A8	✓		740139
TNF-α	A6	✓		740066
Required Mix and Match Components (already included in Pre-defined Panel)				
Standard				Cat. No. 740624
Detection Antibodies				Cat. No. 740625
Buffer Set A				Cat. No. 740623
Plate Options				Filter Plate: Cat. No. 740377
				V-bottom Plate: Cat. No. 740379



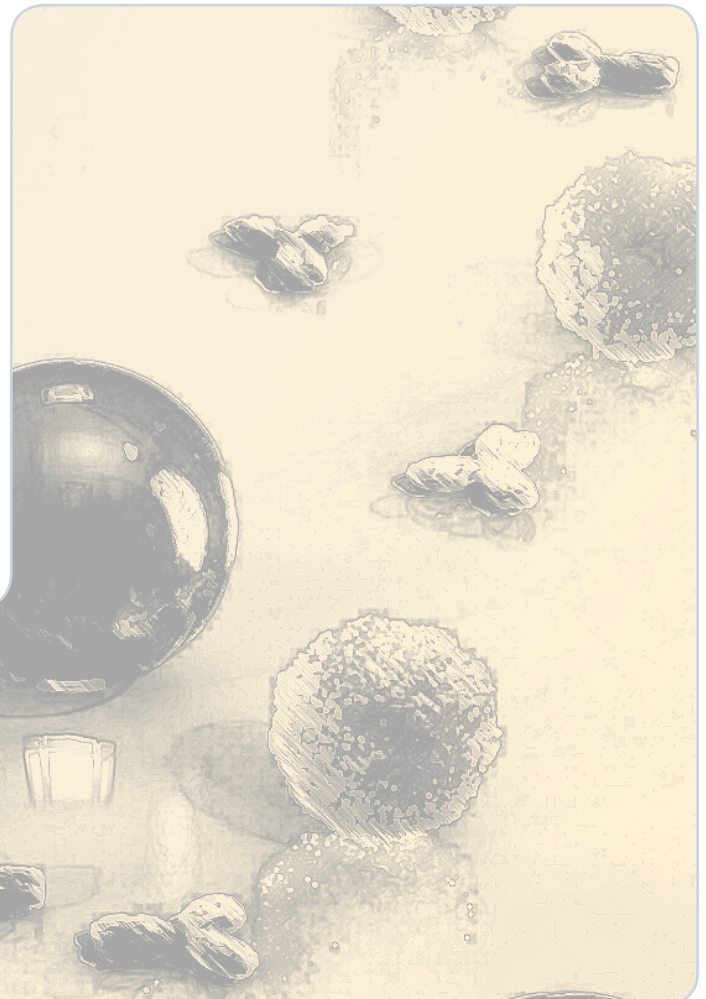
Rat Panels

Rat T helper Cytokine Panels *(Includes either Filter Plate or V-bottom plate)*

Pre-defined Panels include ALL required components and ALL check-marked targets											Mix & Match Capture Beads Cat. No.
Filter Plate Cat. No.		Cat. No. 740283	Cat. No. 740284	Cat. No. 740285	Cat. No. 740286	Cat. No. 740287	Cat. No. 740288	Cat. No. 740289	Cat. No. 740290	Cat. No. 740291	
V-bottom Plate Cat. No.		Cat. No. 740402	Cat. No. 740403	Cat. No. 740404	Cat. No. 740405	Cat. No. 740406	Cat. No. 740407	Cat. No. 740408	Cat. No. 740409	Cat. No. 740410	
Target	Bead ID	Th	Th1	Th2	Th1/Th2	Th17	Th9	Th22	Tfh	ThGM	
GM-CSF	A10	✓	✓	✓	✓	✓				✓	740257
IFN- γ	A5	✓	✓		✓	✓			✓	✓	740253
IL-2	A7	✓	✓							✓	740295
IL-4	B2	✓		✓	✓				✓		740297
IL-5	A6	✓		✓	✓						740294
IL-6	B9	✓	✓	✓	✓	✓		✓	✓		740264
IL-9	B4	✓					✓				740299
IL-10	A4	✓	✓	✓	✓	✓	✓	✓	✓	✓	740252
IL-13	B6	✓		✓	✓			✓	✓		740300
IL-17A	B5	✓				✓					740261
IL-17F	B3	✓				✓					740298
IL-22	B7	✓				✓		✓			740301
TNF- α	A8	✓	✓	✓	✓	✓	✓	✓	✓		740256
Required Mix and Match Components (already included in Pre-defined Panels)											
Standard											Cat. No. 740293
Detection Antibodies											Cat. No. 740292
Buffer Set B											Cat. No. 740373
Plate Options											Filter Plate: Cat. No. 740377 V-bottom Plate: Cat. No. 740379

Rat Inflammation Panel

Pre-defined Panel includes either V-bottom (Cat. No. 740401) or Filter Plate (Cat. No. 740251), all 13 Capture Beads, and all required components		Mix & Match Capture Beads Cat. No.
Target	Bead ID	
CCL2 (MCP-1)	A7	740255
CXCL1 (KC)	A6	740254
GM-CSF	A10	740257
IFN- γ	A5	740253
IL-1 α	B7	740263
IL-1 β	B4	740260
IL-6	B9	740264
IL-10	A4	740252
IL-12 p70	B3	740259
IL-17A	B5	740261
IL-18	B2	740258
IL-33	B6	740262
TNF- α	A8	740256
Required Mix and Match Components (already included in Pre-defined Panel)		
Standard		Cat. No. 740265
Detection Antibodies		Cat. No. 740266
Buffer Set B		Cat. No. 740373
Plate Options		Filter Plate: Cat. No. 740377 V-bottom Plate: Cat. No. 740379



Non-Human Primate Panels

Non-Human Primate T Helper Cytokine Panels *(Includes either Filter Plate or V-bottom plate)*

Pre-defined Panels include ALL required components and ALL check-marked targets								Mix & Match Capture Beads Cat. No.
Filter Plate Cat. No.		Cat. No. 740303	Cat. No. 740381	Cat. No. 740382	Cat. No. 740383	Cat. No. 740384	Cat. No. 740385	
V-bottom Plate Cat. No.		Cat. No. 740387	Cat. No. 740391	Cat. No. 740392	Cat. No. 740393	Cat. No. 740394	Cat. No. 740395	
Target	Bead ID	Th	Th1	Th2	Th1/Th2	Th17	Tfh	
IFN-γ	B3	✓	✓			✓	✓	740310
IL-2	A4	✓	✓			✓		740304
IL-4	B4	✓		✓	✓		✓	740311
IL-5	A5	✓		✓	✓			740305
IL-6	A6	✓	✓	✓	✓	✓	✓	740306
IL-10	A7	✓	✓	✓	✓	✓	✓	740307
IL-13	A10	✓		✓	✓			740308
IL-17A	B5	✓				✓		740312
IL-21	B6	✓				✓	✓	740313
TNF-α	B2	✓	✓	✓	✓	✓	✓	740309
Required Mix and Match Components (already included in Pre-defined Panels)								
Standard							Cat. No. 740314	
Detection Antibodies							Cat. No. 740315	
Buffer Set A							Cat. No. 740368	
Plate Options							Filter Plate: Cat. No. 740377	
							V-bottom Plate: Cat. No. 740379	

Non-Human Primate Cytokine/Chemokine Panel

Pre-defined Panel includes either V-bottom (Cat. No. 740388) or Filter Plate (Cat. No. 740317), all 13 Capture Beads, and all required components		Mix & Match Capture Beads Cat. No.
Target	Bead ID	
CCL2 (MCP-1)	A10	740323
CCL3 (MIP-1α)	B3	740324
CCL4 (MIP-1β)	B4	740325
CCL5 (RANTES)	B5	740326
CCL11 (Eotaxin)	A6	740320
CXCL9 (MIG)	B2	740348
CXCL10 (IP-10)	A7	740321
CXCL11 (I-TAC)	A8	740322
IFN-γ	B9	740329
IL-1β	A4	740318
IL-6	A5	740319
IL-8	B6	740327
TNF-α	B7	740328
Required Mix and Match Components (already included in Pre-defined Panel)		
Standard		Cat. No. 740330
Detection Antibodies		Cat. No. 740331
Buffer Set A		Cat. No. 740368
Plate Options		Filter Plate: Cat. No. 740377
		V-bottom Plate: Cat. No. 740379

Non-Human Primate Inflammation Panel

Pre-defined Panel includes either V-bottom (Cat. No. 740389) or Filter Plate (Cat. No. 740332), all 13 Capture Beads, and all required components		Mix & Match Capture Beads Cat. No.
Target	Bead ID	
CCL2 (MCP-1)	B9	740345
CXCL10 (IP-10)	A6	740335
GM-CSF	B6	740343
IFN-β	B2	740339
IFN-γ	B5	740342
IL-1β	A7	740336
IL-6	A4	740333
IL-8	B7	740344
IL-10	A5	740334
IL-12 (p40)	A8	740337
IL-17A	A10	740338
IL-23	B3	740340
TNF-α	B4	740341
Required Mix and Match Components (already included in Pre-defined Panel)		
Standard		Cat. No. 740346
Detection Antibodies		Cat. No. 740347
Buffer Set A		Cat. No. 740368
Plate Options		Filter Plate: Cat. No. 740377
		V-bottom Plate: Cat. No. 740379

Non-Human Primate Growth Factor Panel

Pre-defined Panel includes either V-bottom (Cat. No. 740386) or Filter Plate (Cat. No. 740217), all 13 Capture Beads, and all required components		Mix & Match Capture Beads Cat. No.
Target	Bead ID	
Angiopoietin-2	A4	740218
EGF	A5	740219
EPO	A6	740220
FGF-basic	A7	740221
G-CSF	A8	740222
GM-CSF	A10	740223
HGF	B2	740224
M-CSF	B3	740225
PDGF-AA	B4	740226
PDGF-BB	B5	740227
SCF	B6	740228
TGF-α	B7	740229
VEGF	B9	740230
Required Mix and Match Components (already included in Pre-defined Panel)		
Standard		Cat. No. 740231
Detection Antibodies		Cat. No. 740232
Buffer Set A		Cat. No. 740368
Plate Options		Filter Plate: Cat. No. 740377
		V-bottom Plate: Cat. No. 740379

Non-Human Primate Adipokine Panel* *(Includes Filter Plate)*

Pre-defined Panel Cat. No. 740233: Includes all 13 Capture Beads and all required components		Mix & Match Capture Beads Cat. No.
Target	Bead ID	
Adiponectin	A4	740234
Adipsin	A5	740235
CCL2 (MCP-1)	A7	740237
CXCL10 (IP-10)	A10	740239
IFN-γ	B6	740243
IL-1β	A8	740238
IL-6	B5	740242
IL-8	B3	740240
IL-10	B2	740296
Leptin	B4	740241
RBP4	A6	740236
Resistin	B7	740244
TNF-α	B9	740245
Required Mix and Match Components (already included in Pre-defined Panel)		
Standard		Cat. No. 740246
Detection Antibodies		Cat. No. 740247
Buffer Set 3 (includes Filter Plate)		Cat. No. 740215

*The NHP Adipokine panel is not suitable for serum/plasma samples due to different sample dilution requirements for different analytes.

Carboxyl Beads (Unconjugated)

Can't find a LEGENDplex™ bead for the target you want? Now you can conjugate your own antibodies to our unconjugated carboxyl beads. Bead IDs are provided so you can fit them appropriately into your LEGENDplex™ panel. If you would like advice regarding the addition of these beads to your panel, talk with us at cst@biolegend.com.

Beads	Cat. No.
A4	740167
A5	740168
A6	740169
A7	740170
A8	740171
A10	740172
B2	740173
B3	740174
B4	740175
B5	740176
B6	740177
B7	740178
B9	740179

Streptavidin-PE Reporter Reagent

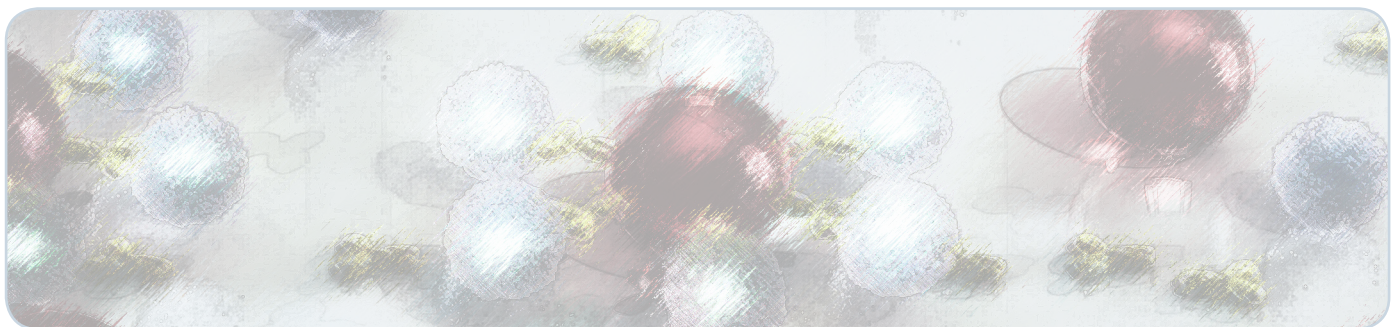
Streptavidin binds to biotin with high affinity. Streptavidin-PE (SA-PE) is useful for detecting biotinylated antibodies. It is used for LEGENDplex™ assays as a reporter reagent. PE can be excited and emit a signal that is detected by a flow cytometer.

Description	Cat. No.
SA-PE	740452

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BioLegend offers a variety of high quality, cost-effective ELISA kits and sets to measure cytokines, chemokines, and soluble biomarkers consistently and reliably. From our easy-to-use, all-inclusive LEGEND MAX™ kits to our ELISA MAX™ Standard sets that provide the core reagents, our selection of ELISA products meets the demand of ELISA beginners to experts alike at a very economical price.

LEGEND MAX™ Kits, ELISA MAX™ Deluxe and Standard Sets

LEGEND MAX™ ELISA Kit



LEGEND MAX™ ELISA Kits are fully validated and ready-to-use, containing 96-well strip plates pre-coated with capture antibody.

ELISA MAX™ Deluxe Sets contain pre-optimized reagents, uncoated 96-well plates and additional buffers/solutions, while still being a cost-effective alternative.

ELISA MAX™ Standard Sets provide the basics to get the job done. This set is perfect for those who want to stretch their budget by supplying and coating their own plates.

ELISA MAX™ Deluxe Set



ELISA MAX™ Standard Set



Product Components

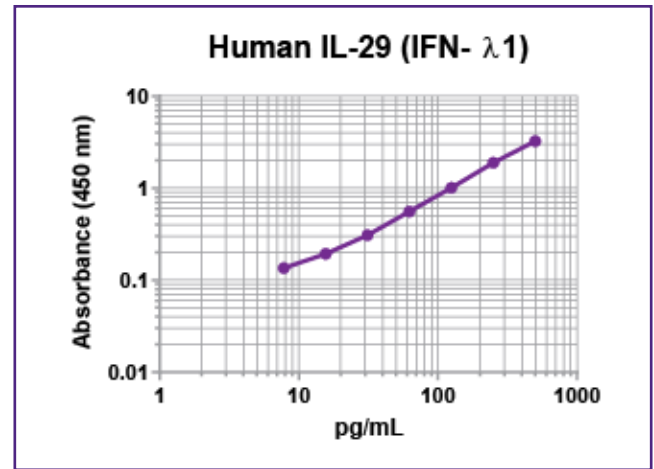
Component	LEGEND MAX™ Kit	ELISA MAX™ Deluxe Set	ELISA MAX™ Standard Set
Pre-coated 96-well stripwell plate	✓		
Uncoated Nunc Maxisorp™ 96-well Plates		✓	
Pre-titrated Capture Antibody		✓	✓
Pre-titrated Detection Antibody	✓	✓	✓
Recombinant Protein Standard	✓	✓	✓
Avidin-HRP	✓	✓	✓
Coating Buffer		✓	
Wash Buffer	✓		
Assay Buffer/Assay Diluent/Matrix	✓	✓	
Substrate/TMB Solution	✓	✓	
Stop Solution	✓		
Plate Sealers	✓		
Assay Time	4 hours	Overnight +6 hours	Overnight +6 hours
ELISA Experience Level	Beginner-Advanced	Intermediate-Advanced	Intermediate-Advanced

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Excellent Dynamic Range & Sensitivity

To ensure that the ELISA detects only the protein of interest, antibody reagents are tested for cross-reactivity against a large number of other proteins, isoforms, multimers (if applicable).

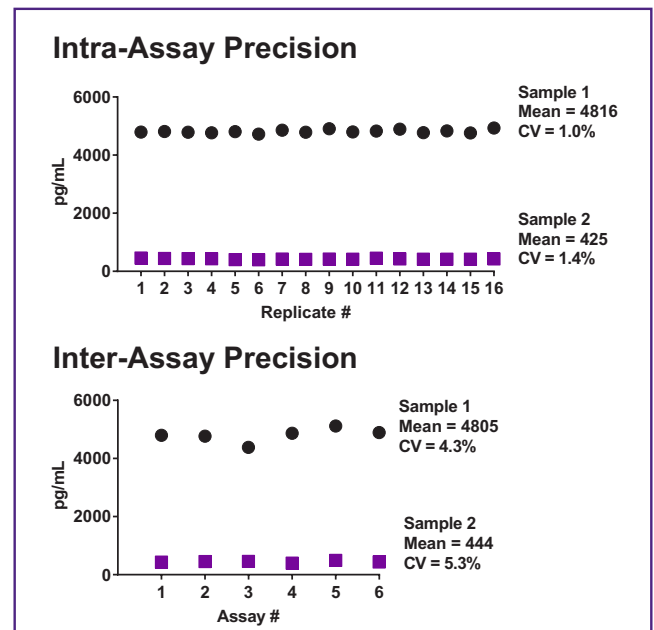
In addition, assay reactivity to orthologous proteins in other species is also assessed.



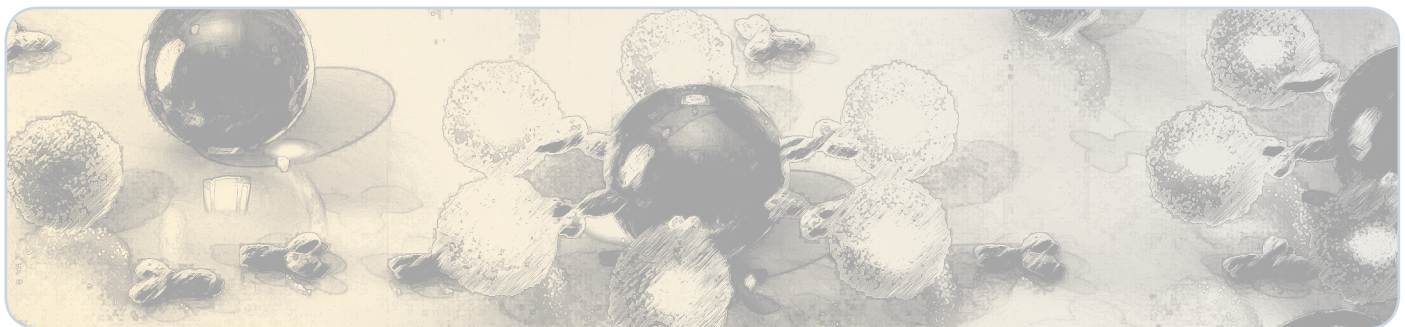
Representative data for a standard curve using the LEGEND MAX™ IL-29 ELISA kit (Cat. No. 446307)

High Precision & Reproducibility

LEGEND MAX™ Kits are provided with intra-assay and inter-assay precision statistics from replicates within one plate and from plate-to-plate to ensure reproducibility.



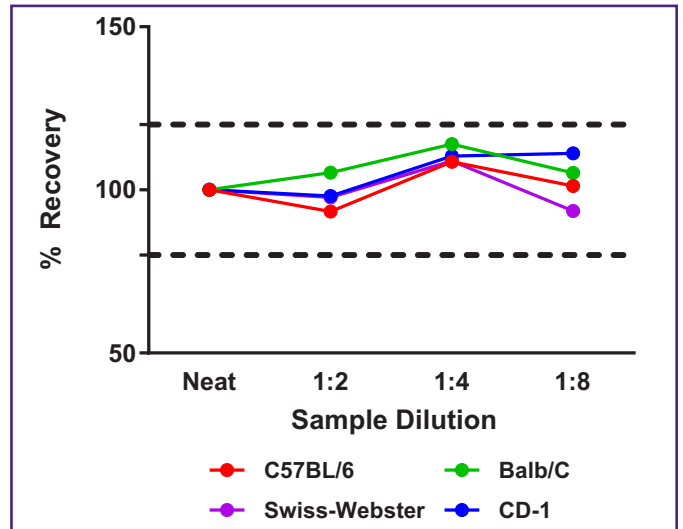
Two samples with different sGARP concentrations were tested for intra and inter-assay precision using the LEGEND MAX™ Human Soluble GARP/LRRC32 ELISA Kit (Cat. No. 440107)



Spike Recovery & Linearity of Dilution

The ability to accurately measure different quantities of a standard spiked into sample matrices describes the recovery characteristics of an ELISA. We collect recovery data for all LEGEND MAX™ Kits, typically tested in serum, plasma, and cell culture supernatant.

LEGEND MAX™ Kits also provide linearity of dilution results, which indicate that the dose-response to an analyte's concentration is linear within the range of the assay standard curve.

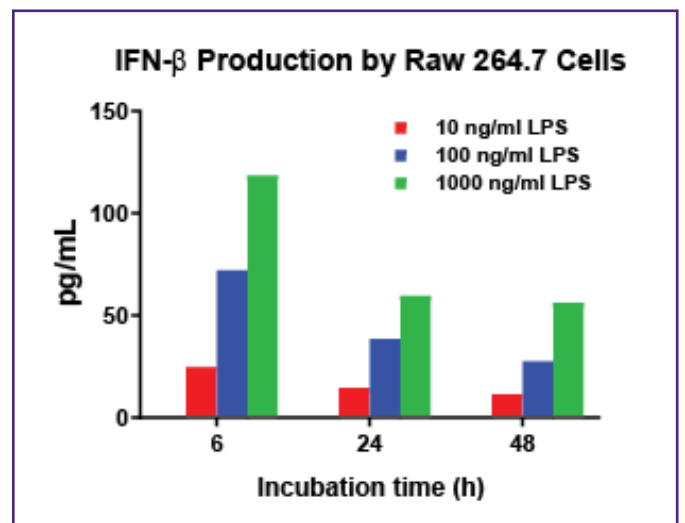


Sera from commonly used mouse strains were serially diluted. MCP-1 concentrations were quantified using the LEGEND MAX™ Mouse MCP-1 ELISA Kit (Cat. No. 446207). Assay linearity fell within the acceptable range (80-120% of undiluted sample).

Biological Sample Detectability

LEGEND MAX™ Kit manuals contain results from testing of *in vitro* biological samples, using biologically relevant conditions in which the expected cytokine or chemokine is produced. Normal serum/plasma values are also provided.

LEGEND MAX™ Kits and ELISA MAX™ Sets are designed for the quantification of proteins in cell culture supernatant, serum, plasma, and other bodily fluids.



RAW 264.7 cells were plated in a 12-well plate at 3×10^6 cells/well until 80% confluent, then stimulated with various concentrations of LPS.

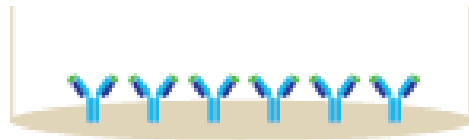
Supernatants were removed at various time points and assayed using the LEGEND MAX™ Mouse IFN- β ELISA Kit (Cat. No. 439407)



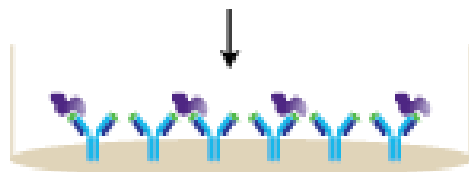
Generalized LEGEND MAX™ Protocol

(Consult Manual for Assay-specific Requirements)

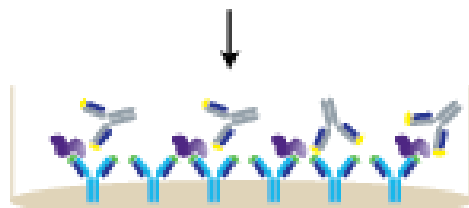
1. Wash 4 times
Add 50 μ L Assay Buffer



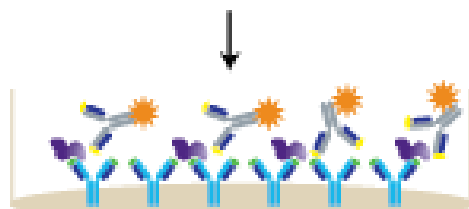
2. Add 50 μ L diluted standards or samples Incubate 2 hrs, RT, shaking



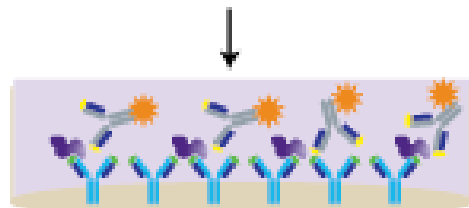
3. Wash 4 times
Add 100 μ L Detection Antibody solution



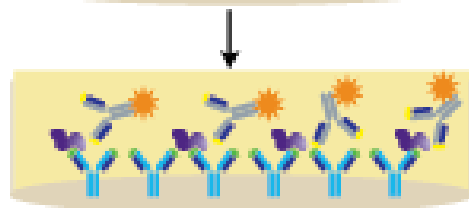
4. Wash 4 times
Add 100 μ L Avidin-HRP A solution



5. Wash 5 times
Add 100 μ L Substrate Solution



6. Add 100 μ L Stop Solution



7. Read absorbance at 450 nm and 570 nm

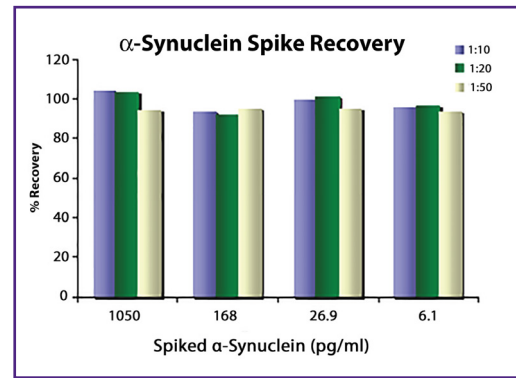
Featured Products:

Neuroscience ELISA Kits and Sets

Neuroscience ELISA Kits	Cat. No.
LEGEND MAX™ β-Amyloid x-40 ELISA Kit with Pre-coated Plate	842301
LEGEND MAX™ β-Amyloid x-42 ELISA Kit with Pre-coated Plate	842401
LEGEND MAX™ Human α-Synuclein ELISA Kit with Pre-coated Plate	844101

Neurodegeneration plays a vital role in diseases of the central nervous system. BioLegend offers several ELISA kits to detect key proteins implicated in neurodegenerative disorders, such as Alzheimer's and Parkinson's Disease.

Our Human α-Synuclein ELISA Kit (Cat. No. 844101, featured on the right) was made in collaboration with the Michael J. Fox Foundation for Parkinson's Research.



Representative data of the detection of spiked α-Synuclein into Human CSF detected by Human α-Synuclein ELISA Kit (Cat. No. 844101).

Human ELISA Kits and Sets

Human	LEGEND MAX™ Kits (Cat. No.)	ELISA MAX™ Deluxe Sets (Cat. No.)	ELISA MAX™ Standard Sets (Cat. No.)
	1 5 plates	5 10 20 plates	5 10 20 plates
α-Synuclein	844101	-	-
APRIL/TNFSF13	439307 439308	-	-
Adiponectin (Acrp30)	442307 442308	442304 442305 442306	-
C5a	442107 442108	-	-
CCL2 (MCP-1)	438807 438808	438804 438805 438806	-
CCL5 (RANTES)	440807 440808	440804 440805 440806	-
CCL8 (MCP-2)	442207 442208	442204 442205 442206	-
CCL13 (MCP-4)	442007 442008	-	-
CCL17 (TARC)	441107 441108	441104	-
CCL20 (MIP-3α)	441407 441408	441404 441405 441406	-
CCL28	441207 441208	441204 441205 441206	-
CD31 (PECAM-1)	443607 443608	-	-
sCTLA-4	437407 437407	-	-
CXCL5	440907 440908	440904 440905 440906	-
CXCL10 (IP-10)	439907 439908	439904 439905 439906	-
CXCL11 (I-TAC)	443307 443308	-	-
Cystatin C	445507 445508	-	-
Erythropoietin (EPO)	442907 442908	-	-
Factor H	442407 442408	-	-
FGF-basic	434309 434310	434311 434312 434313	-
FGL2	436907 436908	-	-
sGARP/LRRC32	440107 440108	-	-
GM-CSF	432007 432008	432004 432005 432006	432001 432002 432003
Granulysin	438007 438008	-	-
Granzyme B	439207 439208	-	-
HAMA	438307 438308	-	-
IFN-γ	430107 430108	430104 430105 430106	430101 430102 430103
IL-1α	445807 445808	445804 445805 445806	-
IL-1β	437007 437008	437004 437005 437006	-
IL-2	431807 431808	431804 431805 431806	431801 431802 431803
IL-4	430307 430308	430304 430305 430306	430301 430302 430303
IL-5	-	430404 430405 430406	430401 430402 430403
IL-6	430507 430508	430504 430505 430506	430501 430502 430503
IL-8	431507 431508	431504 431505 431506	431501 431502 431503
IL-9	434707 434708	434704 434705 434706	-
IL-10	430607 430608	430604 430605 430606	430601 430602 430603
IL-12/IL-23 (p40)	430707 430708	430704 430705 430706	430701 430702 430703
IL-12 (p70)	431707 431708	431704 431705 431706	431701 431702 431703

Human	LEGEND MAX™ Kits (Cat. No.)	ELISA MAX™ Deluxe Sets (Cat. No.)	ELISA MAX™ Standard Sets (Cat. No.)
	1 5 plates	5 10 20 plates	5 10 20 plates
IL-13	435207 435208	-	-
IL-15	435107 435108	435104 435105 435106	-
IL-17A	433917 433918	433914 433915 433916	-
IL-17A/F	435807 435808	-	-
IL-17F	435707 435708	-	-
IL-21	433807 433808	433804	-
IL-22	434507 434508	434504 434505 434506	-
IL-23	437607 437608	-	-
IL-27	434607 434608	-	-
IL-29 (IFN-λ1)	446307 446308	-	-
IL-31	445707 445708	445704 445705 445706	-
IL-32α	-	433504 433505	-
IL-33	435907 435908	-	-
IL-34	439607 439608	439604 439605 439606	-
IL-36γ	445207 445208	-	-
LAP	436807 436808	-	-
LIF	443507 443508	-	-
Mesothelin	438607 438608	438604 438605 438606	-
MIF (Active)	438407 438408	-	-
MMP-2 (Total)	444607 444608	-	-
MMP-3 (Total)	444807 444808	-	-
MMP-9	444907 444908	-	-
MRP14	445307 445308	-	-
MRP8/14 (Calprotectin)	439707 439707	-	-
MPO (Myeloperoxidase)	440007 440008	-	-
NGAL (Lipocalin-2)	443407 443408	-	-
sNogo B	432807 432808	-	-
PCSK9	443107 443108	-	-
PIGF	446007 446008	446004 446005 446006	-
SCF (Free)	442507 442508	442504 442505 442506	-
TGF-β1 (Latent)	432907 432908	-	-
TGF-β1 (Free Active)	437707 437708	-	-
TGF-β1 (Total)	436707 436708	-	-
TNF-α	430207 430208	430204 430205 430206	430201 430202 430203
TSLP	434207 434208	434204 434205 434206	-
sVCAM-1 (CD106)	440307 440308	-	-

Analysis of Non-Human Primate (NHP) Samples

In general, NHP targets and their human counterparts share high sequence homology at DNA and protein levels. Many reagents, including antibodies and immunoassay kits intended for use with human samples, may display cross reactivity with NHP samples. However, this has not been fully validated in-house. Please interpret your NHP sample data based on cross-reacting signals with caution.

Mouse ELISA Kits and Sets

Mouse	LEGEND MAX™ Kits (Cat. No.)	ELISA MAX™ Deluxe Sets (Cat. No.)	ELISA MAX™ Standard Sets (Cat. No.)
	1 5 plates	5 10 20 plates	5 10 20 plates
β-Amyloid x-40	842301	-	-
β-Amyloid x-42	842401	-	-
CCL2 (MCP-1)	446207	432704 432705 432706	432701 432702 432703
CCL11	443907 443908	-	-
CCL28	441307 441308	441304 441305 441306	-
CXCL12 (SDF-1β)	444207 444208	-	-
CXCL13 (BLC)	441907 441908	-	-
Erythropoietin (EPO)	442707 442708	-	-
FGL2	437807 437808	-	-
GITRL	443807 443808	-	-
GM-CSF	432207 432208	432204 432205 432206	432201 432202 432203
IFN-β	439407 439408	-	-
IFN-γ	430807 430808	430804 430805 430806	430801 430802 430803
IgE	-	432404 432405 432406	432401 432402 432403
IL-1α	-	433404 433405 433406	433401 433402 433403
IL-1β	-	432604 432605 432606	432601 432602 432603
IL-2	431007 431008	431004 431005 431006	431001 431002 431003
IL-3	-	432104 432105 432106	432101 432102 432103
IL-4	431107 431108	431104 431105 431106	431101 431102 431103
IL-5	-	431204 431205 431206	431201 431202 431203
IL-6	431307 431308	431304 431305 431306	431301 431302 431303
IL-9	445407 445408	442704 442705 442706	-
IL-10	431417 431418	431414 431415 431416	431411 431412 431413
IL-12 (p70)	433607 433608	433604 433605 433606	-

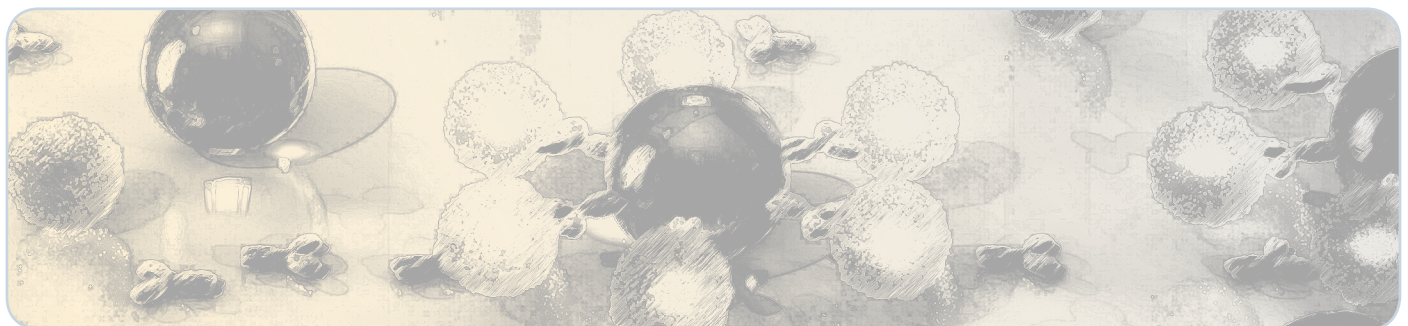
Mouse	LEGEND MAX™ Kits (Cat. No.)	ELISA MAX™ Deluxe Sets (Cat. No.)	ELISA MAX™ Standard Sets (Cat. No.)
	1 5 plates	5 10 20 plates	5 10 20 plates
IL-12/IL-23 (p40)	-	431604 431605 431606	431601 431602 431603
IL-17A	432507 432508	432504 432505 432506	432501 432502 432503
IL-17 A/F	436207 436208	436204 436205 436206	-
IL-17F	436107 436108	-	-
IL-21	446107 446108	-	-
IL-22	436307 436308	436304 436305 436306	-
IL-23 (p19/p40)	433707 433708	433704	-
IL-27 (Heterodimer)	438707 438708	-	-
IL-33	436407 436408	-	-
IL-34	439107 439108	-	-
IL-35 (Heterodimer)	440507 440508	-	-
Isthmin	438907 438908	-	-
Lactadherin	438107 438108	-	-
LIF	445107 445108	-	-
MIF	444107 444108	-	-
NGAL (Lipocalin-2)	443707 443708	-	-
OVA Specific IgE	439807 439808	-	-
PCSK9	443207 443208	-	-
Latent TGF-β	433007 433008	-	-
TGF-β1 (Free Active)	437707 437708	-	-
TGF-β1 (Total)	436707 436708	-	-
TNF-α	430907 430908	430904 430905 430906	430901 430902 430903
TSLP	434107 434108	434104	-

Rat ELISA Kits and Sets

Rat	LEGEND MAX™ Kits (Cat. No.)	ELISA MAX™ Deluxe Sets (Cat. No.)
	1 5 plates	5 10 20 plates
β-Amyloid x-40	842301	-
β-Amyloid x-42	842201	-
CCL11	444007 444008	-
Erythropoietin (EPO)	442807 442808	-
IFN-γ	439007 439008	-
IL-6	437107 437108	-
IL-17A	437907 437908	437904 437905 437906
TGF-β1 (Free Active)	437707 437708	-
TGF-β1 (Total)	436707 436708	-
TNF-α	438207 438208	438204 438205 438206

Ancillary ELISA Reagents

Description	Cat. No.
ELISA Coating Buffer (5X)	421701
ELISA Wash Buffer (20X)	421601
ELISA Assay Diluent (5X)	421203
ELISA Assay Diluent B (5X)	421205
HRP Avidin	405103
HRP Streptavidin	405210
Nunc™ MaxiSorp™ ELISA plates, Uncoated	423501
Plate Sealers	423601
Stop Solution for TMB Substrate	423001
TMB High Sensitivity Substrate Solution	421501
TMB Substrate Set	421101



Frequently Asked Questions

LEGENDplex™

What is the difference between LEGENDplex™ and Luminex® assays?

The LEGENDplex™ and Luminex® platforms both use fluorescence-encoded beads and the basic principles of sandwich immunoassays to multiplex the analysis of several analytes from a single sample. The major difference between the two lies in their modes of data acquisition. LEGENDplex™ can be performed on many commonly available flow cytometers, whereas Luminex®-based cannot be used without dedicated instrumentation.

My standard curve is not linear; can I use the non-linear part of the standard curve during analysis?

Yes. It is possible to use the non-linear part of the standard curve for calculation of results. The LEGENDplex™ data analysis software uses a five-parameter curve-fitting algorithm, which determines the minimum and maximum detection concentrations of each target and reports them. If sample concentrations fall outside of the maximum detectable range, the sample will have to be diluted and reanalyzed.

When do I need to do instrument compensation?

If a single laser instrument is used for both reporter (FL2 or PE) and classification (FL3), then compensation is needed to resolve the signal spillover from FL2 to FL3, and vice-versa. Even on dual laser instruments, some compensation may be required. Please check your machine for the need for compensation and when required, use the compensation beads provided and follow the Flow Cytometer Setup instructions in the LEGENDplex™ manual. In addition, adjust the PMT voltages such that there is good bead separation, the bead populations are not out of scale, and the PE signal is appropriately amplified to ensure proper signal sensitivity.

Is a special software package required for data analysis?

Typically, flow cytometers generate output files in FCS format (e.g. FCS 2.0, 3.0, or 3.1), and in some cases, in list mode file format (LMD). FCS files can be analyzed by different software. Data generated from using LEGENDplex™ kits can be analyzed using the LEGENDplex™ data analysis software freely available for downloading at the BioLegend website (biolegend.com/legendplex). A free-of-charge software license dongle is provided in the kit (required for PC users). The Mac software is available for use with a file license. Please check our website for most updated versions of the software.

What curve-fitting algorithm can I use for generating my standard curve?

The LEGENDplex™ data analysis software uses a default five-parameter curve-fitting algorithm, which determines the minimum and maximum detection concentrations of each target and reports them. If the default algorithm does not work for a particular set of data, other curve-fitting methods are available in the options of the software. If sample concentrations fall outside of the maximum detectable range, the sample will have to be diluted and re-analyzed.

The kit instruction manual says that the kit is validated for serum, plasma, and culture supernatant sample types. Can I also use tissue homogenates with LEGENDplex™?

Yes, all the above sample types may be used with LEGENDplex™ kits as long as they are prepared in a manner compatible with immunoassays. Tissue homogenate samples should be prepared in a neutral pH buffer containing no denaturing chemicals (e.g. SDS, urea, thiourea, cholate, etc.), no ionic detergents, and minimal amounts of non-ionic detergents (e.g. NP-40). The homogenization buffer should avoid excessive ionic salt concentrations (i.e. above physiological levels), and should contain protease inhibitors. In addition, the samples should be centrifuged after lysis in order to remove particulates.

After I finish the assays, how long can I wait before reading my samples (beads) on a flow cytometer?

The plate or tubes containing the bead assays can be re-suspended in Wash Buffer, kept overnight at 4°C while being protected from light, and be read the next day. There may be a decrease in signal, but overall, the assay results should not be significantly affected. Storing the samples for extended periods of time is not recommended, as it could lead to further reductions in signal.

Should I perform the assay with the filter plates or with V-bottom plates?

Filter plates or V-bottom plates have been included in some kits for your convenience. Performing the assay with filter plates is generally recommended. A vacuum filtration unit is required to work with the filter plates. However, if you don't have access to a vacuum manifold, then you can use the V-bottom plates as described in the manual following the recommended assay protocols. Regardless, all plates should be made from low binding polypropylene. Polystyrene ELISA or cell culture plates should not be used.

Frequently Asked Questions *(Continued)*

ELISA

What is the shelf life of BioLegend ELISA Products?

BioLegend's LEGEND MAX™ Kits are guaranteed for 3 months from the date of receipt. ELISA MAX™ Sets are guaranteed for 12 months from the date of receipt. For lot-specific expiration date, refer to the box label on each Kit or Set.

What is the difference between LEGEND MAX™, ELISA MAX™ Deluxe, and ELISA MAX™ Standard?

See Page 16 of this brochure.

What are the stopping points in the ELISA assay?

The plates can be coated with the capture antibody overnight at 4°C, then subsequently be stored at 4°C for an additional 1-2 days. As for the blocking step, you can keep the plate in the blocking buffer overnight or 1-2 days at 4°C (sealed) and continue with rest of the protocol. The plates should not be allowed to dry. It should be noted that prolonged storage of the plates after coating with antibody prior to use can eventually lead to increased background signal.

When should I use LEGEND MAX™ ELISA kits with pre-coated plates vs. other products?

LEGEND MAX™ Kits are ready-to-go, designed for ease-of-use, minimizing requirements for coating the ELISA plates and preparing buffer dilutions. We recommend LEGEND MAX™ Kits for users who are new to ELISAs or are short on time.

Are BioLegend ELISA kits compatible with tissue samples?

BioLegend's ELISA products can be used for tissue/ cell extract/ homogenate samples as long as the samples are prepared in such a way that they are compatible with immune-reactivity.

Tips for sample preparation:

- Tissues/cells should be lysed or homogenized in a neutral pH buffer that contains no denaturing chemicals (such as urea, thiourea, SDS).
- No/minimal levels of detergent (SDS, Triton X-100 etc).
- No excessive ionic strength (salt concentration greater than physiological ionic strength).
- The buffers should contain sufficient protease inhibitor cocktails to preserve the target proteins from proteolytic degradation by enzymes released from cells.

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Contact our sales team today:
[biolegend.com/contact_sales_rep](https://www.biolegend.com/contact_sales_rep)

Contact BioLegend

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