

### **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.

ELISA Kits and Sets information begins on page 16.

### LEGENDplex™ Multi-Analyte Flow Assay Kits

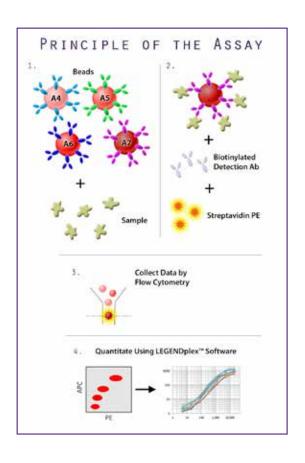
LEGENDplex<sup>™</sup> bead-based immunoassays quantitate up to 13 targets simultaneously from one small sample volume. These assays are based on the same scientific principle as sandwich ELISAs:

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.

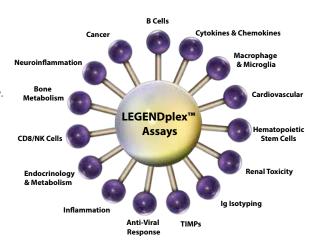


### LEGENDplex™ Applications

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

Each LEGENDplex<sup>™</sup> panel is specifically designed to quantitate biomarker targets that are central to a given cell type, 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.



### LEGENDplex™ Features & Specifications

LEGENDplex<sup>™</sup> 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 μL serum/plasma   25 μL 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.

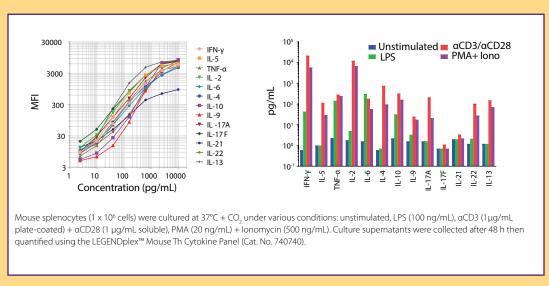
### Mix and Match Assays

Use the LEGENDplex<sup>™</sup> 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<sup>™</sup> target that you don't see in our listings? Or, do you want to combine targets from across multiple panels? Talk things over with our experts to get your customized project underway.

### LEGENDplex™ Mouse Th Cytokine Panel Data



Add to the plate:

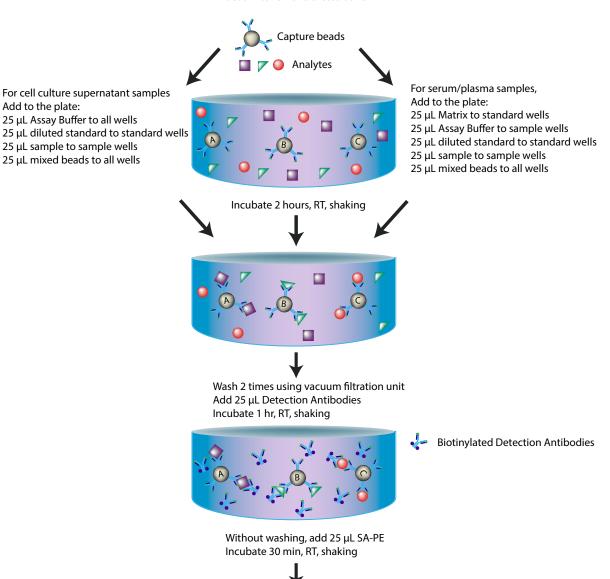
25 µL Assay Buffer to all wells

 $25 \, \mu L$  sample to sample wells

25 µL mixed beads to all wells

### **Assay Procedure Summary for Filter Plate**

Add 100 µL 1X Wash Buffer to filter plate wells Vacuum to remove excess buffer



Wash 2 times using vacuum filtration unit Add 150 µL of 1x Wash Buffer Read on a flow cytometer

To view a detailed LEGENDplex™ assay protocol on JoVE, visit: jove.com/video/56440

## Human LEGENDplex™ Panels

### Human Angiogenesis Panel 1

Pre-defined Panel ALL check-marked	Mix & Match Capture Beads				
Filter Plate		Cat. No. 740697	Cat. No.		
V-bottom Plate		Cat. No. 740698			
Target	Bead ID	10-plex			
Angiopoietin-1	A5	V	740701		
Angiopoietin-2	A6	<b>✓</b>	740702		
CXCL8 (IL-8)	B2	<b>✓</b>	740706		
EGF	A7	V	740703		
FGF-basic	A10	V	740705		
IL-6	A4	V	740597		
PECAM-1	B3	<b>V</b>	740707		
PIGF	B4	<b>✓</b>	740708		
VEGF	B6	<b>✓</b>	740710		
TNF-α	B7	<b>✓</b>	740711		
Required Mix and	Match Component	s (already included in Pre-defined Panels	)		
Standard		Cat. No. 740699	Cat. No. 740699		
Detection Antibodies		Cat. No. 740700			
Buffer Set I		Cat. No. 740623			
Plate Options		Filter Plate: Cat. No. 740377			
		V-bottom Plate: Cat. No. 7403	379		

### Human Apolipoprotein (Apo) Panel

Pre-defined Panels include ALL Capt	ure Beads and ALL required components	Mix & Match		
Filter Plate	Cat. No. 740453	Capture Bead Cat. No.		
V-bottom Plate	Cat. No. 740454			
Target	Bead ID			
Apo Al	A4	740457		
Apo All	A5	740458		
Apo B100	A6	740459		
Apo CII	A7	740460		
Apo CIII	A10	740461		
Apo D	B3	740462		
Apo E	B4	740463		
Apo E4	B5	740464		
Аро Н	B6	740465		
Apo J	B7	740466		
Аро М	B9	740467		
Required Mix and Match Componen	ts (already included in Pre-defined Panel)			
Standard	Cat. No. 740455			
Detection Antibodies	Cat. No. 740456	Cat. No. 740456		
Buffer Set D	Cat. No. 740375	Cat. No. 740375		
Plate Options	Filter Plate: Cat. No. 740377			
	V-bottom Plate: Cat. No. 7403	79		

### Human Fibrinolysis Panel

Pre-defined Pane ALL check-marke	Mix & Match Capture Beads		
Filter Plate		Cat. No. 740760	Cat. No.
V-bottom Plate		Cat. No. 740761	
Target	Bead ID	5-plex	
Anti-thrombin	A5	V	740765
Factor XIII	B5	V	740768
Fibrinogen	A4	· ·	740764
Plasminogen	A6	· ·	740766
Prothrombin	B2	<b>✓</b>	740767
Required Mix and	d Match Components (a	lready included in Pre-defined Panels)	
Standard		Cat. No. 740762	
Detection Antiboo	lies	Cat. No. 740763	
Buffer Set D		Cat. No. 740375	
Plate Options		Filter Plate: Cat. No. 74037	7
		V-bottom Plate: Cat. No. 74	10379

### **Human Thrombosis Panels**

Pre-defined Panels ALL check-marked	Mix & Match Capture Bead				
Filter Plate	Cat. No. Cat. No. Cat. No. 740891 740905 740907		Cat. No.		
V-bottom Plate		Cat. No. 740892	Cat. No. 740906	Cat. No. 740908	1
Target	Bead ID	10-plex	7-plex	3-plex	
IL-6	A4	~		~	740597
P-selectin	A5	~	V		740896
D-Dimer	A6	~	V		740897
PSGL-1	A7	V	V		740898
tPA	A10	~	~		740899
sCD40L	B2	~	V		740900
PAI-1	B4	~	~		740901
Tissue Factor	B5	V		<b>/</b>	740902
Factor IX	B6	V	V		740903
CXCL8 (IL-8)	B7	V		~	740904
Required Mix and I	Match Components	(already includ	led in Pre-de	fined Panel)	
Standard			Cat. No. 740	0894	
Detection Antibodies			Cat. No. 740895		
Buffer Set L			Cat. No. 740893		
Plate Options			Filter Plate:	Cat. No. 7403	77
			V-hottom F	Plate: Cat. No.	740379

### Human Vascular Inflammation Panel 1

Pre-defined Panels include ALL required components and ALL check-marked targets						Mix & Match	
Filter Plate		Cat. No. 740551	Cat. No. 740551 Cat. No. 740589	Cat. No. 740591	Cat. No. 740593	Cat. No. 740595	Capture Bead Cat. No.
V-bottom Plate		Cat. No. 740552	Cat. No. 740590	Cat. No. 740592	Cat. No. 740594	Cat. No. 740596	7
Target	Bead ID	Tissue Culture	Serum/Plasma	CRP	Urine	Urine	
CRP	A7	V		V	V		740558
Cystatin C	B9	V	V			V	740566
ICAM-1	B5	<i>'</i>	V		V		740563
IGFBP-4	B4	V	V		V		740476
MMP-2	A8	V	<b>V</b>		<b>'</b>		740559
MMP-9	B7	~	<b>V</b>		<b>V</b>		740565
MPO	B2	~	<b>/</b>		<b>'</b>		740561
MRP8/14	A5	<b>✓</b>	<b>V</b>			<b>✓</b>	740556
Myoglobin	A4	<b>✓</b>	<b>✓</b>		<b>✓</b>		740555
NGAL	A6	<b>✓</b>	<b>V</b>		<b>/</b>		740557
OPN	A10	<i>V</i>	<b>'</b>			V	740560
SAA	B3	<b>✓</b>	<b>v</b>		V		740562
VCAM-1	B6	V	·		V		740564
Required Mix ar	nd Match Components (alrea	dy included in Pre-defined Pane	1)				
Standard						Cat. No. 740554	
Detection Antibodies					Cat. No. 740553		
Buffer Set C						Cat. No. 740374	
Plate Options						Filter Plate: Cat. No. 740	377
						V-bottom Plate: Cat. No.	7/0370

## Human LEGENDplex™ Panels

### Human Adhesion Molecule Panel

Pre-defined Panels include ALL required components and ALL check-marked targets			Mix & Match Capture Beads Cat. No.
Filter Plate		Cat. No. 740945	Cat. No.
V-bottom Plate	<u> </u>	Cat. No. 740946	
Target	Bead ID	13-plex	
ALCAM	A10	V	740953
CD44	A4	V	740949
EpCAM	B6	· · · · · · · · · · · · · · · · · · ·	740958
E-selectin	B3	V	740955
ICAM-1	A5	V	740950
ICAM-2	A6	V	740951
ICAM-3	B7	· · · · · · · · · · · · · · · · · · ·	740959
L-selectin	B9	V	740960
NCAM	A8	V	740952
PECAM-1	B4	· · · · · · · · · · · · · · · · · · ·	740956
P-selectin	B5	· · · · · · · · · · · · · · · · · · ·	740957
PSGL-1	A7	<b>✓</b>	740898
VCAM-1	B2	<b>✓</b>	740954
Required Mix a	and Match Components (a	already included in Pre-defined Panel	s)
Standard		Cat. No. 740948	
Detection Antibodies		Cat. No. 740947	
Buffer Set G		Cat. No. 740539	
Plate Options		Filter Plate: Cat. No. 740377	
		V-bottom Plate: Cat. No. 740	)379

### Human TIMP Panel

Pre-defined Panels include ALL Captu	Mix & Match		
Filter Plate	Cat. No. 740479	Capture Bead Cat. No.	
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 Component	s (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 B Cell Panels

Pre-defined Panels include ALL required components and ALL check-marked targets						Mix & Match	
Filter Plate		Cat. No. 740526	Cat. No. 740526 Cat. No. 740528 Cat. No. 740530 Cat. No. 740532		Cat. No. 740532	Cat. No. 740534	Capture Bead Cat. No.
V-bottom Plate		Cat. No. 740527	Cat. No. 740529	Cat. No. 740531	Cat. No. 740533	Cat. No. 740535	7
Target	Bead ID	B Cell	B Effector 1 (Be1)	B Effector 2 (Be2)	B Effector 1/2 (Be1/2)	B Cell Activator	
APRIL	B6	V				V	740548
BAFF	B7	V				V	740549
CD40L	B9	V				V	740550
IFN-γ	B3	V	V		V		740545
IL-2	A10	V		<b>V</b>	V		740543
IL-4	A6	V		<b>V</b>	V		740540
IL-6	A8	V		<b>V</b>	V		740542
IL-10	A7	V					740541
IL-12p70	B5	V	V		V		740547
IL-13	A5	V		<b>'</b>	<b>/</b>		740047
IL-17A	B4	V			<b>✓</b>		740546
TNF-α	A4	V	~	·	V		740538
TNF-β	B2	V	V		V		740544
Required Mix ar	nd Match Components (alread	y included in Pre-defined Pane	el)		·		
Standard						Cat. No. 740537	
Detection Antibo	odies					Cat. No. 740536	
Buffer Set A1						Cat. No. 740525	
Plate Options						Filter Plate: Cat. No. 7403	377
						V-bottom Plate: Cat. No.	

### Human Immunoglobulin Isotyping Panels

Pre-defined Panels include ALL required components and ALL check-marked targets					Mix & Match		
Filter Plate		Cat. No. 740637	Cat. No. 740637 Cat. No. 740639 Cat. No. 740714 Cat. No. 740641		Cat. No. 740641	Cat. No. 740508	Capture Bead Cat. No.
V-bottom Plate		Cat. No. 740638	Cat. No. 740640	Cat. No. 740715	Cat. No. 740642	Cat. No. 740509	7
Target	Bead ID	8-plex	6-plex	IgGs	lgE	lgD	
IgA	B4	V	V				740652
lgD	B6	· · ·				V	740654
lgE	A7	· · · · · · · · · · · · · · · · · · ·			V		740650
lgG1	A4	V	<b>V</b>	V			740647
lgG2	A5	V	V	V			740648
lgG3	A6	· ·	<b>V</b>	V			740649
lgG4	B3	~	V	V			740651
IgM	B5	· ·	<b>V</b>				740653
Required Mix ar	nd Match Components (alrea	dy included in Pre-defined Pane	el)				
Standard						Cat. No. 740646	
Detection Antibodies						Cat. No. 740645	
Buffer Set A1					Cat. No. 740525		
Plate Options	late Options F					Filter Plate: Cat. No. 7403	77
		<u> </u>				V-bottom Plate: Cat. No.	740379

### Human CD8/NK Cell Panel (Includes Filter Plate)

Pre-defined Panel Cat. No. 740267: includes ALL 13 Capture Beads and ALL required components		
Bead ID		
B9	740280	
B5	740277	
B6	740278	
B2	740274	
B3	740275	
B4	740276	
A4	740268	
A5	740269	
A7	740044	
A6	740270	
A8	740272	
B7	740279	
TNF-α A10		
onents (already included in Pre-	defined Panel)	
Standard		
Detection Antibodies		
	Bead ID  B9  B5  B6  B2  B3  B4  A4  A5  A7  A6  A8  B7  A10	

Cat. No. 740075

### Human Cytokine Panel 2 (Includes Filter Plate)

Detection Antibodies

Buffer Set (includes Filter Plate)

Pre-defined Panel Cat Beads and ALL requir	t. No. 740102: Includes ALL 13 Capture ed components	Mix & Match Capture Beads Cat. No.		
Target	Bead ID			
GM-CSF	A7	740106		
IFN-α	A8	740107		
IL-1α	A5	740104		
IL-1β	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 Filt	er Plate)	Cat No 740075		

### Human Anti-Virus Response Panels

Pre-defined Panels ALL check-marked	Mix & Match Capture Bead				
Filter Plate V-bottom Plate		Cat. No. 740349	Cat. No. 740350	Cat. No.	
		Cat. No. 740390	Cat. No. 740396	1	
Target	Bead ID	Anti-Virus Response Panel	Type 1/2/3 Interferon Panel		
CXCL10 (IP-10)	A7	~		740363	
GM-CSF	B5	V		740362	
IFN-α2	B3	V	V	740351	
IFN-β	B6	V	V	740353	
IFN-γ	B9	V	V	740352	
IFN-λ1	A8	V	V	740354	
IFN-λ2/3	B4	V	V	740355	
IL-1β	A4	V		740119	
IL-6	A5	V		740356	
IL-8	A10	V		740357	
IL-10	B7	V		740358	
IL-12 (p70)	B2	V		740361	
TNF-α	A6	~		740359	
Required Mix and	Match Compone	nts (already included	in Pre-defined Panel)		
Standard			Cat. No. 740365		
Detection Antibodi	es	Cat. No. 740364			
Buffer Set A			Cat. No. 740368		
Plate Options			Filter Plate: Cat. No. 74	10377	
			V-bottom Plate: Cat. N	lo. 740379	

### Human/NHP Free Active/Total TGF-β1 Panel\*

Pre-defined Panels include ALL Capture Beads	Mix & Match			
Filter Plate	Cat. No. 740449	Capture Bead Cat. No.		
V-bottom Plate	Cat. No. 740450			
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 E	Cat. No. 740437			
Plate Options	Filter Plate: Cat. No. 740377			
	V-bottom Plate: Cat. No. 740379			

<sup>\*</sup> The assay is able to detect free active TGF- $\beta 1$  without sample treatment or total TGF- $\beta 1$  after sample treatment.

### Human Inflammation Panel 1

Pre-defined Pane ALL check-marke	Mix & Match Capture Beads				
Filter Plate  V-bottom Plate  Target Bead ID		Cat. No. 740808	Cat. No.		
		Cat. No. 740809			
		13-plex			
CCL2 (MCP-1)	A8	V	740813		
IFN-α2	A5	· · · · · · · · · · · · · · · · · · ·	740120		
IFN-γ	A6	V	740121		
IL-1β	A4	<b>~</b>	740812		
IL-6	A10	V	740124		
IL-8	B2	<i>'</i>	740125		
IL-10	B3	V	740126		
IL-12 (p70)	B4	<i>'</i>	740127		
IL-17A	B5	V	740815		
IL-18	B6	<b>✓</b>	740129		
IL-23	B7	<b>✓</b>	740816		
IL-33	B9	<b>✓</b>	740817		
TNF-α	A7	· · · · · · · · · · · · · · · · · · ·	740122		
Required Mix an	d Match Components	already included in Pre-defined Panel	s)		
Standard		Cat. No. 740811			
Detection Antibo	dies	Cat. No. 740810			
Buffer Set A		Cat. No. 740368			
Plate Options		Filter Plate: Cat. No. 740377			
		V-bottom Plate: Cat. No. 740	V-bottom Plate: Cat. No. 740379		

### Human Inflammation Panel 2

Pre-defined Panels inc ALL check-marked tar	Mix & Match Capture Bead					
Filter Plate	Cat. No. 740775			Cat. No.		
V-bottom Plate		Cat. No. 740776	Cat. No. 740884	Cat. No. 740886		
Target	Bead ID	TC	S/P (11-plex)	S/P (2-plex)		
CXCL12 (SDF-1)	B2	V	~		740785	
CX3CL1 (Fractalkine)	B7	~	~		740790	
Free Active TGF-β1	A4	~	~		740779	
PAI-1	A5	~		~	740780	
PTX3	A7	~	~		740782	
sCD25 (IL-2Ra)	A10	~	~		740784	
sCD40L	A8	~	~		740783	
sCD130 (gp130)	B9	~		~	740791	
sRAGE	B6	~	~		740789	
sST2	B3	~	~		740786	
sTNF-RI	B4	~	~		740787	
sTNF-RII	B5	~	~		740788	
sTREM-1	A6	~	~		740781	
Required Mix and Mat	ch Component	s (already incl	uded in Pre-de	fined Panel)		
Standard			Cat. No. 7407	Cat. No. 740778		
Detection Antibodies			Cat. No. 7407	777		
Buffer Set H	Cat. No. 740620					
Plate Options			Filter Plate: C	at. No. 740377		
			V-bottom Pla	ite: Cat. No. 74	0379	

# Human LEGENDplex™ Panels Human Macrophage/Microglia Panels

Pre-defined Panel	s include ALL required comp	onents and ALL check-marked targets				Mix & Match
Filter Plate		Cat. No. 740502 Cat. No. 740504 Cat. No. 740506		Cat. No. 740508	Capture Bead Cat. No.	
V-bottom Plate		Cat. No. 740503	Cat. No. 740505	Cat. No. 740507	Cat. No. 740509	7
Target	Bead ID	Macrophage/Microglia	M1 Macrophage	M2 Macrophage	M1/M2 Macrophage	
Arginase	B2	V		<b>V</b>		740518
CCL17 (TARC)	B3	V		V	V	740519
CXCL10 (IP-10)	B9	· · ·	·		~	740524
IFN-γ	B7	V	<b>✓</b>			740523
IL-1β	A10	V	<b>✓</b>		V	740517
IL-1RA	B4	· · · · · · · · · · · · · · · · · · ·		V	V	740520
IL-4	A7	V		V		740515
IL-6	A6	<i>'</i>	<b>✓</b>	V	~	740514
IL-10	A8	V		V	V	740516
IL-12p40	B5	V	<b>✓</b>		V	740521
IL-12p70	A4	V	<b>✓</b>		V	740512
IL-23	B6	~	<b>✓</b>		V	740522
TNF-α	A5	V	✓		V	740513
Required Mix and	Match Components (already	included in Pre-defined Panel)				
Standard					Cat. No. 740511	
Detection Antibodi	ies				Cat. No. 740510	
Buffer Set A1					Cat. No. 740525	
Plate Options					Filter Plate: Cat. No. 740377	
					V-bottom Plate: Cat. No. 740379	)

### Human T Helper Cytokine Panels

Pre-defined Pa	nels include ALL i	required component	ts and ALL check-m	arked targets						Mix & Match
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	Capture Beads Cat. No.
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	V	V		~	~				740052
IL-2	A6	V	V		<b>V</b>					740717
IL-4	B6	V		V	<b>V</b>					740042
IL-5	A4	V		V	<b>V</b>					740043
IL-6	A7	V	V	V	V	V		V	V	740044
IL-9	A8	V					V			740045
IL-10	A10	V	<b>V</b>	V	<b>V</b>	V	V	<b>V</b>	V	740046
IL-13	A5	V		V	<b>V</b>					740047
IL-17A	B4	V				V				740546
IL-17F	B5	V				V				740718
IL-21	B7	V				<b>/</b>			<b>/</b>	740719
IL-22	B9	V				V		<b>V</b>		740720
TNF-α	B3	V	<b>V</b>	V	<b>V</b>	V	V	V	<b>V</b>	740053
Required Mix a	and Match Compo	nents (already inclu	ded in Pre-defined	Panels)						
Standard C							Cat. No. 740759			
Detection Antibodies Cat						Cat. No. 740758				
Buffer Set Cat. 1						Cat. No. 740368				
Plate Options									Filter Plate: Cat. No. 740377	
									V-bottom Plate: Ca	at. No. 740379

Pre-defined Pan ALL check-mark	Mix & Match Capture Beads		
Filter Plate V-bottom Plate Target Bead ID		Cat. No. 740795	Cat. No.
		Cat. No. 740796	
		13-plex	
β-NGF	B4	V	740802
BDNF	A7	<b>✓</b>	740797
CCL2 (MCP-1)	A5	· · · · · · · · · · · · · · · · · · ·	740793
CX3CL1	B9	V	740805
IL-6	B2	V	740800
IL-18	B5	V	740112
sRAGE	B7	· ·	740804
sTREM-1	B3	V	740801
sTREM-2	A6	V	740794
TGF-β1	A8	V	740798
TNF-α	B6	· · · · · · · · · · · · · · · · · · ·	740803
VEGF	A10	· · · · · · · · · · · · · · · · · · ·	740799
VILIP-1	A4	<b>✓</b>	740792
Required Mix an	d Match Components (alr	eady included in Pre-defined Panel	s)
Standard		Cat. No. 740811	
Detection Antibo	dies	Cat. No. 740806	
Buffer Set A		Cat. No. 740368	
Plate Options		Filter Plate: Cat. No. 740377	
		V-bottom Plate: Cat. No. 740	379

### Human Proinflammatory Chemokine Panel (Includes Filter Plate)

Pre-defined Panel Cat. No. Beads and ALL required co	Mix & Match Capture Beads Cat. No.		
Target	Bead ID		
CCL2 (MCP-1)	A8	740076	
CCL3 (MIP-1α)	B2	740077	
CCL4 (MIP-1β)	B9	740078	
CCL5 (RANTES)	A10	740079	
CCL11 (Eotaxin)	A6	740080	
CCL17 (TARC)	A7	740081	
CCL20 (MIP-3a)	B5	740082	
CXCL1 (GROα)	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 C	omponents (already included in Pre-	defined Panel)	
Standard	Cat. No. 740398		
Detection Antibodies	Cat. No. 740072		
Buffer Set (includes Filter Pla	Cat. No. 740075		

### Human Immune Checkpoint Panel 1

Pre-defined Panel ALL check-marked	Mix & Match Capture Bead				
Filter Plate V-bottom Plate		Cat. No. 740866	Cat. No. 740961	Cat. No. 740963	Cat. No.
		Cat. No. 740867	Cat. No. 740962	Cat. No. 740964	
Target	Bead ID	TC (12-plex)	S/P (10-plex)	S/P (2-plex)	
4-1BB	A6	V	~		740872
B7.2 (CD86)	A8	~	~		740874
CTLA-4	B2	~	~		740876
Galectin-9	B9	~	~		740882
LAG-3	B7	V	V		740881
PD-1	B5	V	~		740879
PD-L1	B3	~	~		740877
PD-L2	B4	V		V	740878
sCD25 (IL-2Ra)	A4	~	~		740870
sCD27	A7	~		~	740873
TGF-β1(Free Active)	A10	V	V		740875
Tim-3	B6	~	V		740880
Required Mix and	Match Com	ponents (already	included in Pre-	defined Panel)	
Standard				Cat. No. 74086	9
Detection Antibod	ies			Cat. No. 74086	8
Buffer Set M				Cat. No. 74098	1
Plate Options				Filter Plate: Ca	t. No. 740377
				V-bottom Plate	e: Cat. No. 740379

### Human Adipokine Panel\* (Includes Filter Plate)

Pre-defined Panel Cat. Beads and ALL required	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-1β	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 Matc	h Components (already included in Pre-	-defined Panel)		
Standard	Cat. No. 740210			
Detection Antibodies		Cat. No. 740211		
Buffer Set 3 (includes Filte	r Plate)	Cat. No. 740215		

<sup>\*</sup>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 panels.

### Human Hematopoietic Stem Cell Panels

Human Bone Metabolism Par	ıel	7		1	l	
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Pre-defined Panels include ALL required components and ALL check-marked targets					Mix & Match Capture Bead	
Filter Plate  V-bottom Plate		Cat. No. 740655	Cat. No. 740674	Cat. No. 740672	Cat. No.	
		Cat. No. 740656	Cat. No. 740675	Cat. No. 740673		
Target	Bead ID	Bone Metabolism	Bone Resorption	Bone Formation		
ACP5	B6	V	V		740664	
ALPL	B3	V		V	740663	
BMP-2	B7	V		V	740670	
DKK-1	B2	~	~		740671	
IL-1β	A10	V	V		740669	
IL-6	A4	~	~		740667	
Leptin	B9	V		V	740665	
OPG	A7	V		V	740660	
OPN	B5	V	~		740661	
PTH	A5	V	<b>'</b>		740668	
RANKL	A8	V	<b>/</b>		740666	
TNF-α	B4	V	<b>'</b>		740053	
Required Mix	and Match Comp	onents (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 Diabesity Panels**

Pre-defined Panels include ALL required components and ALL check-marked targets					Mix & Match Capture Bead
Filter Plate		Cat. No. 740909	Cat. No. 740911	Cat. No. 740913	Cat. No.
V-bottom Plate		Cat. No. 740910	Cat. No. 740912	Cat. No. 740914	
Target	Bead ID	TC (11-plex)	S/P (7-plex)	S/P (4-plex)	
Cortisol	B5	V		~	740925
C-Peptide	A8	V	~		740921
GLP-1 (Active)	B9	V	~		740928
GLP-1 (Total)	A5	~	~		740919
Glucagon	B3	V	~		740923
IL-1β	B6	V	~		740699
IL-6	B7	V	~		740927
Insulin	A7	V		V	740920
Leptin	B4	~		~	740205
PAI-1	A4	~		V	740918
TNF-α	A10	V	~		740273
Required Mix and	Match Compo	nents (already in	cluded in Pre-d	efined Panel)	
Standard			Cat. No. 74091	5	
Detection Antibodies			Cat. No. 740916		
Buffer Set A			Cat. No. 740368		
Plate Options				Filter Plate: Cat. No. 740377	
				V-bottom Plat	e: Cat. No. 740379

V-bottom Plate: Cat. No. 740379

					V Bottom	late. cat. 110. 7 1037 3
Pre-defined Par	nels include ALL required comp	onents and ALL check-marked targe	ts			
Filter Plate		Cat. No. 740610	Cat. No. 740612	Cat. No. 740614	Cat. No. 740616	Mix & Match
V-bottom Plate	!	Cat. No. 740611	Cat. No. 740613	Cat. No. 740615	Cat. No. 740617	Capture Bead Cat. No.
Target	Bead ID	HSC	HSC Lymphoid	HSC Erythroid	HSC Myeloid	
CXCL12	B5	~	V	V	V	740606
FLT3L	A5	V	V		V	740598
GM-CSF	A6	V		· ·	· ·	740599
IL-3	A8	V	V	V	V	740601
IL-6	A4	V	· ·	· ·		740597
IL-7	B9	V	~			740609
IL-11	B2	V	V	· ·		740603
IL-15	B6	V	V			740607
IL-34	A10	V			V	740602
LIF	B4	V	~			740605
M-CSF	B7	V			· ·	740608
SCF	B3	V	V	V	· ·	740604
Required Mix a	nd 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	

## Human LEGENDplex™ Panels

### 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 IGFBP Panel

Pre-defined Panels include ALL	Mix & Match		
Filter Plate	Cat. No. 740468	Capture Bead Cat. No.	
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 Compo	onents (already included in Pre-defined Panel)		
Standard	Cat. No. 740470	Cat. No. 740470	
Detection Antibodies	Cat. No. 740471	Cat. No. 740471	
Buffer Set C	Cat. No. 740374		
Plate Ontions	Filter Plate: Cat. No. 740377	Filter Plate: Cat. No. 740277	

V-bottom Plate: Cat. No. 740379

### Human Essential Immune Response Panel

Pre-defined Panels include ALL required components and ALL check-marked targets			Mix & Match Capture Beads Cat. No.
Filter Plate V-bottom Plate		Cat. No. 740929	Cat. No.
		Cat. No. 740930	
Target	Bead ID	13-plex	
IL-4	A4	V	740933
IL-2	A5	V	740934
CXCL10 (IP-10)	A6	V	740935
IL-1β	A7	V	740936
TNF-α	A8	V	740937
CCL2 (MCP-1)	A10	~	740938
IL-17A	B2	V	740939
IL-6	B3	~	740940
IL-10	B4	~	740941
IFN-γ	B5	V	740942
IL-12p70	B6	V	740943
CXCL8 (IL-8)	B7	V	740904
Free Active TGF-β1	B9	V	740944
Required Mix and M	Natch Components (already i	ncluded in Pre-defined Panels	5)
Standard		Cat. No. 740932	
Detection Antibodies		Cat. No. 740931	
Buffer Set A		Cat. No. 740368	
Plate Options		Filter Plate: Cat. No. 740377	
		V-bottom Plate: Cat. No. 740	379

### 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 Comp	onents (already included in Pre-d	efined Panel)
Standard		Cat. No. 740213
Detection Antibodies		Cat. No. 740214
Buffer Set 4 (includes Filter Plate)		Cat. No. 740216

### Human Kidney Function Panel 1, For Urine Samples

Pre-defined Panels include ALL	Mix & Match		
Filter Plate	Cat. No. 740577	Capture Bead Cat. No.	
V-bottom Plate	Cat. No. 740578		
Target	Bead ID		
β2-microglobulin	A5	740567	
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	
Required Mix and Match Comp	onents (already included in Pre-defined Panel)		
Standard	Cat. No. 740580	Cat. No. 740580	
Detection Antibodies	Cat. No. 740579	Cat. No. 740579	
Buffer Set G	Cat. No. 740539	Cat. No. 740539	
Plate Options	Filter Plate: Cat. No. 740377	Filter Plate: Cat. No. 740377	
	V-bottom Plate: Cat. No. 740379	V-bottom Plate: Cat. No. 740379	

### Human Kidney Function Panel 2, For Serum/Plasma Samples

Pre-defined Panels include ALL	Mix & Match		
Filter Plate	Cat. No. 740581	Capture Bead Cat. No.	
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 Comp	onents (already included in Pre-defined Panel)		
Standard	Cat. No. 740584		
Detection Antibodies	Cat. No. 740583	Cat. No. 740583	
Buffer Set G	Cat. No. 740539	Cat. No. 740539	
Plate Options	Filter Plate: Cat. No. 740377	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	Mix & Match		
Filter Plate	Cat. No. 740585	Capture Bead Cat. No.	
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 Comp	onents (already included in Pre-defined Panel)		
Standard	Cat. No. 740588		
Detection Antibodies	Cat. No. 740587	Cat. No. 740587	
Buffer Set G	Cat. No. 740539	Cat. No. 740539	
Plate Options	Filter Plate: Cat. No. 740377	Filter Plate: Cat. No. 740377	
	V-bottom Plate: Cat. No. 740379		

## Mouse LEGENDplex™ Panels

### Mouse Anti-Virus Response Panels

Pre-defined Panels ALL check-marked t	Mix & Match Capture Bead Cat. No.			
Filter Plate V-bottom Plate		Cat. No. 740349	Cat. No. 740350	Cat. No.
		Cat. No. 740390	Cat. No. 740396	1
Target	Bead ID	Anti-Virus Response Panel	Type 1/2/3 Interferon Panel	
CCL2 (MCP-1)	A7	V		740627
CCL5 (RANTES)	A10	V		740628
CXCL1 (KC)	A5	V		740626
CXCL10 (IP-10)	B3	V		740630
GM-CSF	B4	V		740631
IFN-α	B7	~	~	740633
IFN-β	B6	V	V	740145
IFN-γ	A4	V	V	740065
IL-1β	B2	<b>V</b>		740157
IL-6	B9	V		740634
IL-10	B5	V		740632
IL-12p70	A8	V		740139
TNF-α	A6	V		740066
Required Mix and M	latch Compone	nts (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. N	lo. 740379

#### 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-1α	A4	740135	
IL-1β	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 Ma	tch 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/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 Comp	efined 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

<sup>\*</sup> The assay is able to detect free active TGF- $\beta 1$  without sample treatment or total TGF- $\beta 1$  after sample treatment.

#### Mouse IgE Panel

Pre-defined Par ALL check-mark	Mix & Match Capture Beads		
Filter Plate		Cat. No. 7407	69 Cat. No.
V-bottom Plate		Cat. No. 7407	70
Target	Bead ID	1-plex	
lgE	B5	<i>'</i>	740773
Required Mix a	nd Match Components	(already included in Pre-defined	Panels)
Standard		Cat. No. 740772	
Detection Antibo	odies	Cat. No. 740771	
Buffer Set C		Cat. No. 740374	
Plate Options		Filter Plate: Cat. No. 7	40377
		V-bottom Plate: Cat.	No. 740379

### Mouse Immunoglobulin Isotyping Panel

Pre-defined Panel inclu or Filter Plate (Cat. No. 2 required components	Mix & Match Capture Beads Cat. No.	
Target	Bead ID	
lgA	B2	740500
lgG1	A4	740496
lgG2a	A5	740497
lgG2b	B4	740498
lgG3	A7	740499
lgM	B3	740501
Required Mix and Matc	h Components (already included in Pre-c	lefined 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 Inflammation Panel

Pre-defined Panel inclu or Filter Plate (Cat. No. : ALL required compone	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 Matc	h 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 Macrophage/Microglia Panels

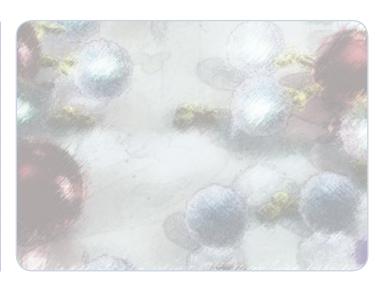
Pre-defined Panels targets	Mix & Match Capture Bead				
Filter Plate		Cat. No. 740845	Cat. No. 740847	Cat. No. 740849	Cat. No.
V-bottom Plate		Cat. No. 740846	Cat. No. 740848	Cat. No. 740850	
Target	Bead ID	Macrophage/ Microglia	M1 Macrophage	M2 Macrophage	
CCL17 (TARC)	B6	~		V	740863
CCL22 (MDC)	A8	~		~	740857
CXCL1 (KC)	A4	~	~		740853
G-CSF	B5	~		~	740862
IL-1β	B9	V	~		740865
IL-6	B3	~	V	V	740860
IL-10	A10	~		~	740858
IL-12p40	B7	V	~		740864
IL-12p70	B2	~	V		740859
IL-18	A6	~	~		740855
IL-23	A7	~	~		740856
TGF-β1	A5	V		~	740854
TNF-α	B4	~	V		740861
Required Mix and I	Match Compon	ents (already in	cluded in Pre-d	efined Panel)	
Standard	Cat. No. 74085	2			
Detection Antibodie	Cat. No. 74085	1			
Buffer Set B				Cat. No. 74037	3
Plate Options	Filter Plate: Cat. No. 740377				

V-bottom Plate: Cat. No. 740379

## Mouse LEGENDplex™ Panels

### Mouse Proinflammatory Chemokine (Includes Filter Plate)

Pre-defined Panel Cat. N Beads and ALL required	Mix & Match Capture Beads Cat. No.	
Target	rget Bead ID	
CCL2 (MCP-1)	A10	740089
CCL3 (MIP-1a)	B4	740090
CCL4 (MIP-1β)	B5	740091
CCL5 (RANTES)	A4	740092
CCL11 (Eotaxin)	A6	740093
CCL17 (TARC)	A7	740094
CCL20 (MIP-3a)	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	defined Panel)	
Standard	Cat. No. 740370	
Detection Antibodies	Cat. No. 740074	
Buffer Set (includes Filter I	Cat. No. 740075	



### Mouse T Helper Cytokine Panels

Pre-defined Panels include ALL required components and ALL check-marked targets								Mix & Match		
Filter Plate		Cat. No. 740740	Cat. No. 740744	Cat. No. 740746	Cat. No. 740750	Cat. No. 740748	Cat. No. 740752	Cat. No. 740754	Cat. No. 740756	Capture Beads Cat. No.
V-bottom Plat	te	Cat. No. 740741	Cat. No. 740745	Cat. No. 740747	Cat. No. 740751	Cat. No. 740749	Cat. No. 740753	Cat. No. 740755	Cat. No. 740757	
Target	Bead ID	Th	Th1	Th2	Th1/Th2	Th17	Th9	Th22	Tfh	
IFN-γ	A4	~	~		~	~				740065
IL-2	A7	V	V		~					740054
IL-4	A10	V		V	V					740055
IL-5	A5	V		<b>V</b>	<b>V</b>					740056
IL-6	A8	V	V	V	V	V		V	V	740057
IL-9	B3	~					V			740774
IL-10	B2	V	V	V	V	V	V	<b>V</b>	V	740059
IL-13	B9	V		V	~					740739
IL-17A	B4	V				<b>V</b>				740061
IL-17F	B5	V				<b>V</b>				740062
IL-21	B6	V				<b>V</b>			<b>V</b>	740737
IL-22	B7	~				~		~		740738
TNF-α	A6	~	V	V	~	V	V	V	V	740066
Required Mix	and Match Comp	onents (already in	cluded in Pre-def	ined Panels)						
Standard								Cat. No. 740743		
Detection Antibodies						Cat. No. 740742				
Buffer Set H						Cat. No. 740620				
Plate Options						Filter Plate: Cat. No. 740377				
						V-bottom Plate: Cat. No. 740				

### Mouse Hematopoietic Stem Cell Panels

<b>Pre-defined Panels</b>	include ALL required com	ponents and ALL check-marked targe	ets			Mix & Match
Filter Plate V-bottom Plate		Cat. No. 740676	Cat. No. 740676 Cat. No. 740678 Cat. No. 740680		Cat. No. 740682	Capture Bead Cat. No.
		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	V	V	V	V	740696
EPO	B7	· ·		~		740695
GM-CSF	A10	V		~	V	740689
IL-3	B4	V	<b>'</b>			740691
IL-5	A5	V			V	740056
IL-6	A8	V	<b>'</b>	V		740057
IL-15	B2	~	<b>'</b>			740690
IL-34	A4	V			V	740686
LIF	B5	~	<b>'</b>			740693
M-CSF	A6	V			V	740687
SCF	B6	~	<b>'</b>	V	V	740694
TGF-β1	B3	V	<b>~</b>	V	V	740692
TPO	A7	V		V		740688
Required Mix and M	Match Components (alread	y included in Pre-defined Panel)				
Standard		Cat. No. 740684				
Detection Antibodie	S				Cat. No. 740685	
Buffer Set A1		Cat. No. 740620				
Plate Options		Filter Plate: Cat. No. 740377				
		V-bottom Plate: Cat. No. 74037	'9			

## Rat LEGENDplex™ 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			
Filter Plate		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	Capture Bead Cat. No.
V-bottom Plate	e	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	1
GM-CSF	A10	V	~	V	~	~				V	740257
IFN-γ	A5	V	V		V	V			V	V	740253
IL-2	A7	<b>V</b>	V		V					<b>V</b>	740295
IL-4	B2	<b>'</b>		V	<b>'</b>				<b>V</b>		740297
IL-5	A6	<b>'</b>		V	<b>'</b>						740294
IL-6	B9	<b>'</b>	<b>V</b>	V	<b>'</b>	<b>/</b>		<b>/</b>	<b>V</b>		740264
IL-9	B4	<b>'</b>					V				740299
IL-10	A4	<b>'</b>	<b>'</b>	V	<b>'</b>	<b>'</b>	V	<b>/</b>	<b>V</b>	V	740252
IL-13	B6	<b>'</b>		V	<b>'</b>			<b>V</b>			740300
IL-17A	B5	~				~					740261
IL-17F	B3	V				~					740298
IL-22	B7	~				~		· ·			740301
TNF-α	A8	~	V	V	V	~	V	~	V		740256
Required Mix a	and Match Compo	nents (already in	ncluded in Pre-de	fined Panels)							
Standard							Cat. No. 740293	\$			
Detection Antibodies							Cat. No. 740292	2			
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 include or Filter Plate (Cat. No. 740 ALL required components	Mix & Match Capture Beads Cat. No.	
Target	et Bead ID	
CCL2 (MCP-1)	A7	740255
CXCL1 (KC)	A6	740254
GM-CSF	A10	740257
IFN-γ	A5	740253
IL-1α	B7	740263
IL-1β	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 C	omponents (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 LEGENDplex™ 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
Filter Plate		Cat. No. 740303	Cat. No. 740381	Cat. No. 740382	Cat. No. 740383	Cat. No. 740384	Cat. No. 740385	Capture Beads Cat. No.
V-bottom Pla	ate	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	7
IFN-γ	B3	V	<b>V</b>		<b>V</b>	V	V	740310
IL-2	A4	~	<b>V</b>		<b>V</b>			740304
IL-4	B4	V		V	V		V	740311
IL-5	A5	V		V	<b>V</b>			740305
IL-6	A6	V	<b>/</b>	V	<b>/</b>	V	V	740306
IL-10	A7	V	<b>/</b>	V	V	<b>/</b>	V	740307
IL-13	A10	V		V	<b>/</b>			740308
IL-17A	B5	V				<b>V</b>		740312
IL-21	B6	<i>V</i>				<b>V</b>	V	740313
TNF-α	B2	· · · · · · · · · · · · · · · · · · ·	· · ·	V	<b>✓</b>	<b>/</b>	<b>✓</b>	740309
Required Mix	x and Match Componen	ts (already included in Pre-c	lefined Panels)					
Standard							Cat. No. 740314	
Detection Antibodies						Cat. No. 740315		
Buffer Set A						Cat. No. 740368		
Plate Options						Filter Plate: Cat. No. 740377		
								o. 740379

### Non-Human Primate Cytokine/Chemokine Panel

Pre-defined Panel include or Filter Plate (Cat. No. 7 required components	Mix & Match Capture Beads Cat. No.	
Target	Bead ID	
CCL2 (MCP-1)	A10	740323
CCL3 (MIP-1a)	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-d	efined 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 Growth Factor Panel

Pre-defined Panel inclu or Filter Plate (Cat. No. 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	В7	740229
VEGF	B9	740230
Required Mix and Mate	h Components (already included in Pre-d	efined 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 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		
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 Mato	h Components (already includ	ed 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. 7403

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

Pre-defined Panel Cat. N Beads and ALL required	Mix & Match Capture Beads Cat. No.			
Target	arget 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	Cat. No. 740215			

<sup>\*</sup>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<sup>™</sup> 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<sup>™</sup> 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

Beads	Cat. No.
B2	740173
B3	740174
B4	740175
B5	740176
B6	740177
B7	740178
B9	740179

### Streptavidin-PE Reporter Reagent

Steptavidin 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

## Request a Custom LEGENDplex™ Panel

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





**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



ELISA MAX™ Deluxe Set



**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 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™ Standard Set



### **Product Components**

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

### Excellent Dynamic Range & Sensitivity

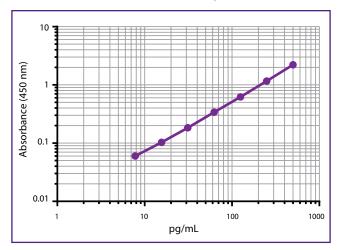
To ensure that the ELISA detects only the protein of interest, antibody reagents are tested for cross-reactivity against a large number of other proteins, isoforms, and multimers (if applicable).

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

## High Precision & Reproducibility

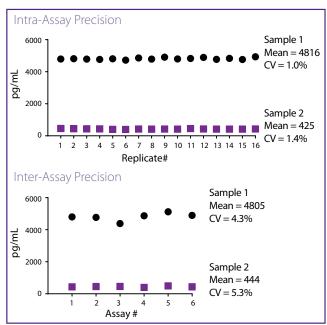
LEGEND MAX™ Kits are provided with intra-assay and inter-assay precision statistics from replicates within one plate and from plate-to-plate to ensure reproducibility.

### LEGEND MAX™ Mouse IFN-β ELISA Kit



Representative data for a standard curve using the LEGEND MAX  $^{\text{\tiny{TM}}}$  Mouse IFN- $\beta$  ELISA kit (Cat. No. 439407).

### LEGEND MAX™ Human Soluble GARP/LRRC32 ELISA Kit



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

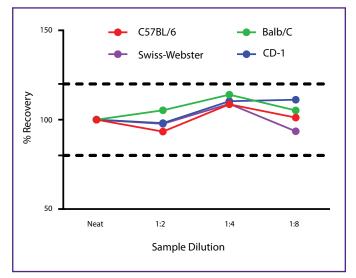


### Spike Recovery & Linearity of Dilution

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.

#### LEGEND MAX™ Mouse MCP-1 ELISA Kit



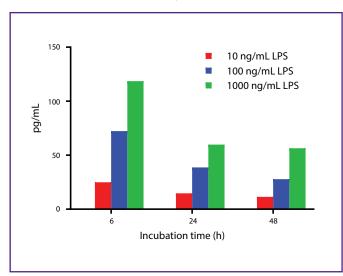
Sera from commonly used mouse strains were serially diluted. MCP-1 concentrations were quantified using the LEGEND MAX™ Mouse MCP-1 ELISA Kit (Cat. No. 446207). Assay linearity fell within the acceptable range (80-120% of undiluted sample).

### 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.

### IFN-β Production by RAW 264.7 Cells



RAW 264.7 cells were plated in a 12-well plate at 3 x  $10^6$  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 $^{\text{TM}}$  Mouse IFN- $\beta$  ELISA Kit (Cat. No. 439407).



## Generalized LEGEND MAX™ ELISA Protocol

(Consult Manual for Assay-specific Requirements)

1.	Wash 4 timesAdd 50 μL Assay Buffer	
2.	Add 50 µL diluted standards or samples Incubate 2 hrs, RT, shaking	3/1/3/13/13
3.	Wash 4 times  Add 100 μL Detection Antibody solution	
4.	Wash 4 times  Add 100 μL Avidin-HRP A solution	****
5.	Wash 5 times Add 100 μL Substrate Solution	
6.	Add 100 μL Stop Solution	

7. Read absorbance at 450 nm and 570 nm

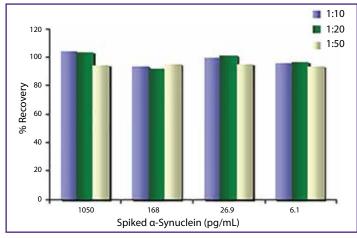
### Featured Products:

#### Neuroscience ELISA Kits

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  $\alpha$ -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  $\alpha$ -Synuclein into Human CSF detected by Human  $\alpha$ -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.)
		5 plates	5 plates
α-Synuclein	844101	-	-
APRIL/TNFSF13	439307	-	-
Adiponectin (Acrp30)	442307	442304	-
BDNF	446607	446604	
C5a	442107	-	-
CCL2 (MCP-1)	438807	438804	-
CCL5 (RANTES)	440807	440804	-
CCL8 (MCP-2)	442207	442204	-
CCL13 (MCP-4)	442007	-	-
CCL17 (TARC)	441107	441104	-
CCL20 (MIP-3α)	441407	441404	-
CCL28	441207	441204	-
CD31 (PECAM-1)	443607	-	-
sCTLA-4	437407	-	-
CXCL5	440907	440904	-
CXCL10 (IP-10)	439907	439904	-
CXCL11 (I-TAC)	443307	-	-
Cystatin C	445507	-	-
Erythropoietin (EPO)	442907	-	-
Factor H	442407	_	
FGF-basic	434309	434311	-
FGL2	436907	-	-
sGARP/LRRC32	440107	_	-
GM-CSF	432007	432004	432001
Granulysin	438007	-	-
Granzyme B	439207	_	-
Human Anti-mouse	438307	-	-
Antibodies (HAMA)	446407	445404	
IFN-α2	446407	446404	-
IFN-γ	430107	430104	430101
IGFALS	445907	445904	-
IL-1α	445807	445804	-
IL-1β	437007	437004	-
IL-2	431807	431804	431801
IL-4	430307	430304	430301
IL-5	-	430404	430401
IL-6	430507	430504	430501
IL-8	431507	431504	431501
IL-9	434707	434704	-
IL-10	430607	430604	430601
IL-12/IL-23 (p40)	430707	430704	430701

Human	LEGEND MAX™ Kits (Cat. No.)	ELISA MAX™ Deluxe Sets (Cat. No.)	ELISA MAX™ Standard Sets (Cat. No.)
		5 plates	5 plates
IL-12 (p70)	431707	431704	431701
IL-13	435207	-	-
IL-15	435107	435104	-
IL-17A	433917	433914	-
IL-17A/F	435807	-	-
IL-17F	435707	-	-
IL-21	433807	433804	-
IL-22	434507	434504	-
IL-23	437607	-	-
IL-27	434607	-	-
IL-29 (IFN-λ1)	446307	-	-
IL-31	445707	445704	-
IL-32α	-	433504	-
IL-33	435907	-	-
IL-34	439607	439604	-
ΙL-36γ	445207	-	-
LAP	436807	-	-
LIF	443507	-	-
Mesothelin	438607	438604	-
MIF (Active)	438407	-	-
MMP-2 (Total)	444607	-	-
MMP-3 (Total)	444807	-	-
MMP-9	444907	-	-
MRP14	445307	-	-
MRP8/14 (Calprotectin)	439707	-	-
Myeloperoxidase (MPO)	440007	-	-
NGAL (Lipocalin-2)	443407	-	-
sNogo B	432807	-	-
PCSK9	443107	-	-
PIGF	446007	446004	
SCF (Free)	442507	442504	-
TGF-β1 (Latent)	432907	-	-
TGF-β1 (Free Active)	437707	-	-
TGF-β1 (Total)	436707	-	-
TNF-α	430207	430204	430201
TSLP	434207	434204	-
sVCAM-1 (CD106)	440307	-	-
VEGF	446507	446504	-
Osteocalcin (Uncarboxylated)	446707	-	-

### 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.)
		5 plates	5 plates
β-Amyloid x-40	842301	-	-
β-Amyloid x-42	842401	-	-
CCL8 (MCP-2)	446907	446904	-
CCL11	443907	-	-
CCL2 (MCP-1)	446207	432704	432701
CXCL12 (SDF-1β)	444207	-	-
CXCL13 (BLC)	441907	-	-
Erythropoietin (EPO)	442707	-	-
FGL2	437807	-	-
GITRL	443807	-	-
GM-CSF	432207	432204	432201
IFN-β	439407	-	-
IFN-γ	430807	430804	430801
IgE	-	432404	432401
IL-10	431417	431414	431411
IL-12 (p70)	433607	433604	-
IL-12/IL-23 (p40)	-	431604	431601
IL-17 A/F	436207	436204	-
IL-17A	432507	432504	432501
IL-17F	436107	-	-
IL-1α	-	433404	433401
IL-1β	-	432604	432601
IL-2	431007	431004	431001
IL-21	446107	-	-
IL-22	436307	436304	-
IL-23 (p19/p40)	433707	433704	-

Mouse	LEGEND MAX™ Kits (Cat. No.)	ELISA MAX™ Deluxe Sets (Cat. No.)	ELISA MAX™ Standard Sets (Cat. No.)
		5 plates	5 plates
IL-27 (Heterodimer)	438707	-	-
IL-3	-	432104	432101
IL-33	436407	-	-
IL-34	439107	-	-
IL-35 (Heterodimer)	440507	-	-
IL-4	431107	431104	431101
IL-5	-	431204	431201
IL-6	431307	431304	431301
IL-9	445407	442704	-
Isthmin	438907	-	-
Lactadherin	438107	-	-
LIF	445107	-	-
MIF	444107	-	-
NGAL (Lipocalin-2)	443707	-	-
OVA Specific IgE	439807	-	-
PCSK9	443207	-	-
Latent TGF-β	433007	-	-
TGF-β1 (Free Active)	437707	-	-
TGF-β1 (Total)	436707	-	-
TNF-α	430907	430904	430901
TSLP	434107	434104	-

### Rat ELISA Kits and Sets

Rat	LEGEND MAX™ Kits (Cat. No.)	ELISA MAX™ Deluxe Sets (Cat. No.)
		5 plates
β-Amyloid x-40	842301	-
β-Amyloid x-42	842201	-
CCL11	444007	-
Erythropoietin (EPO)	442807	-
IFN-γ	439007	-
IL-17A	437907	437904
IL-6	437107	-
TGF-β1 (Free Active)	437707	-
TGF-β1 (Total)	436707	-
TNF-α	438207	438204

### Ancillary ELISA Reagents

Description	Cat. No.
ELISA Assay Diluent (5X)	421203
ELISA Assay Diluent B (5X)	421205
ELISA Coating Buffer (5X)	421701
ELISA Wash Buffer (20X)	421601
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<sup>™</sup> and Luminex<sup>®</sup> assays?

The LEGENDplex<sup>™</sup> and Luminex<sup>®</sup> 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<sup>™</sup> can be performed on many commonly available flow cytometers, whereas Luminex<sup>®</sup>-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<sup>™</sup> 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<sup>™</sup> 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?

The filter plate and V-bottom plate LEGENDplex™ assay formats have comparable performance characteristics. The use of one format over another is a decision to be made by the end user based on the availability of laboratory equipment. 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 manufactured from low binding polypropylene. Polystyrene ELISA or cell culture plates should not be used.

### Frequently Asked Questions

### **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 a 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 the 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.

### **Nous contacter**



Service technique

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