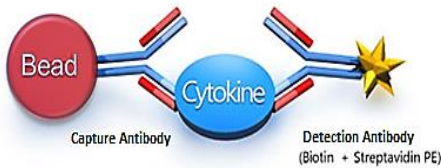
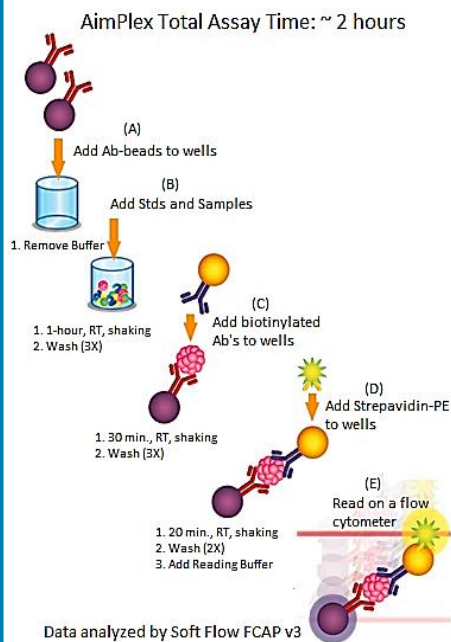


- Up to 24-Plex
 - * 2 bead sizes (S4) and (S5)
 - * 12 levels of fluorescence intensity for each bead size
- Works on flow cytometers equipped with a single **blue** or dual (**blue** and **red**) lasers
 - * Uses the **PE** and either **PE-Cy5** or **APC** detectors
 - * No need to purchase and maintain another piece of expensive equipment
- Classic "Sandwich" style immunoassay format using capture (cAb) and detection (dAb) antibodies:



Assay Protocol Overview



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

Benefits

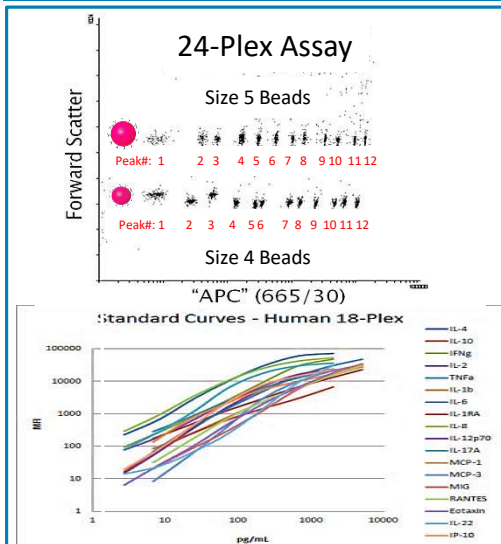
- Multiplexing
 - Less sample needed – only 15 μ L!
 - Less assay time and cost
- Consistent and superior assay performance
- Flexible assay panels
 - "Mix and Match" one or more individual analyte from a given Group to create a custom panel for your research
 - Some assays can multiplex across Groups – contact YSL Bio for details
- **400 assays now available**
- Premixed standards and beads are "ready to use" – less pipetting steps
- Available in 32-test and 96-test kits

Assay Specifications

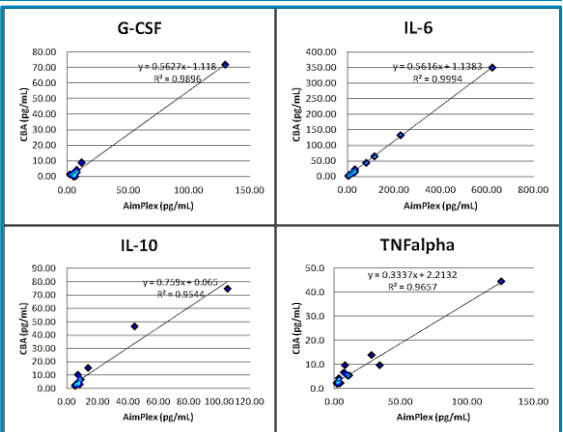
- Sample types: cell culture supernatant, saliva, plasma, cell/tissue lysates, serum, BALF, pleural and peritoneal fluids, and others
- LOD¹: Majority of the assays < 10 pg/mL
- LLOQ²: Majority of the assays < 20 pg/mL
- ULOQ³: Majority of the assays > 5,000 pg/mL
- Standard dose recovery: 70-130%
- Intra-assay CV: < 10%; Inter-assay CV: < 20%
- Cross-reactivity of Panel analytes: negligible
- Sample volume: 15 μ L

1. LOD: Limit of Detection (Sensitivity)
2. LLOQ: Lower Limit of Quantification (Precision and Accuracy)
3. ULOQ: Upper Limit of Quantification (Precision and Accuracy)

Representative Data

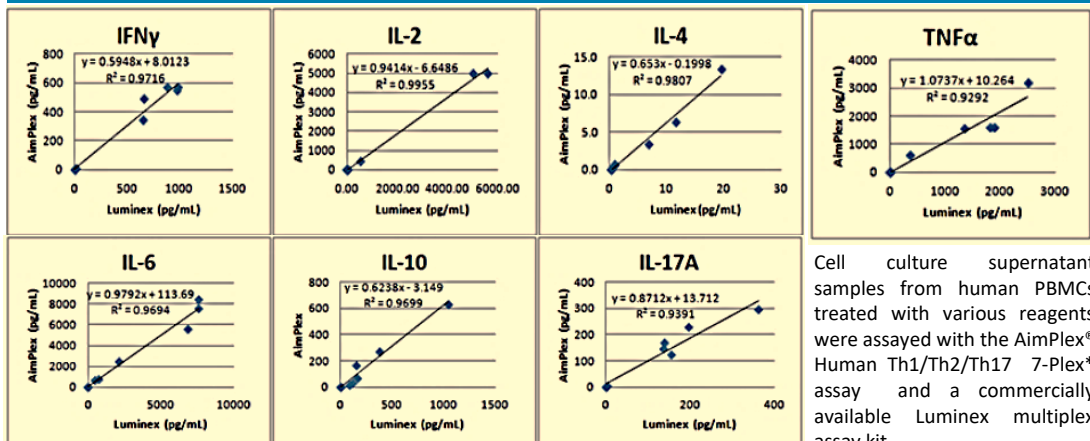


Correlation with CBA™ Assays



Human normal and abnormal serum samples were measured with both AimPlex® and CBA assays and analyzed on a BD FACSCanto II.

Correlation with Luminex™ Assays



Cell culture supernatant samples from human PBMCs treated with various reagents were assayed with the AimPlex® Human Th1/Th2/Th17 7-Plex* assay and a commercially available Luminex multiplex assay kit.

*Assays analyzed on a BD FACSCalibur™, Sony EC800™ or Beckman Coulter CyAn ADP™
Note: Trademarks are the property of their respective owners

Human

Activin A	CXCL12/SDF-1	IL-2R α /sCD25	NRG1-beta1/HRG1-beta1
Adiponectin	CXCL13/BCA-1	IL-3	OPG/Osteoprotegerin
AFF	CXCL14/BRAC	IL-4	OPN/Osteopontin/BNSP
ALCAM/sCD166	CXCL16/SYCB16	IL-5	OSM/Oncostatin M
Amphiregulin/AREG	Cystatin C/CST3	IL-6	PAPPA
ANGPT-1/Angiopoietin-1	E-Cadherin/CDH1/sCD324	IL-6R- α /sCD127	PD-1/sCD279
Artemin/ARTN/Neublastin	EGF	IL-7	PDGF-AA
BDNF	EGFR/ErbB1	IL-8/CXCL8	PDGF-AB
Betacellulin/BTC	EG-VEGF/PROK1/PK1	IL-9	PDGF-BB
β -NGF/NGFB	Endoglin/sCD105	IL-10/CSIF	PDCD1LG1/PD-L1/sCD274
BIGH3/TGFB1/ β IG-H3	Endostatin	IL-11	PDCD1LG2/PD-L2/sCD273
BlyS/BAFF/sCD257/TNFSF13B	EpCAM/MK-1/sCD326	IL-12 (p70)	PECAM-1/sCD31
BMP-2	EPO-R	IL-12/IL-23 (p40)	PIGF/PIG-F
BMP-4	E-selectin/ELAM-1/sCD62E	IL-13	Pro-BDNF
CA15-3/MUC1	Ferritin	IL-15	Procalcitonin/PCT
CA19-9	FGF-1/FGF-acidic/HBGF-1	IL-16/LCF	P-selectin/LECAM-3/sCD62P
CA125/MUC16	FGF-2/FGF-basic/HBHG-2	IL-17A/CTLA-8	RAGE/AGER/sRAGE
CA50	FGF-4	IL-17C	Resistin/ADSF
CCL1/SCYA1/I-309	FGF-7/KGF	IL-17F	SCF/MGF/KIT-Ligand
CCL2/SCYA2/MCP-1	FGF-9/HBGF-9/GAF	IL-18	SLAMF4/2B4/NAIL/sCD244
CCL3/SCYA3/MIP-1 α	FGF-19	IL-19	SLAMF8/BLAME/sCD353
CCL4/SCYA4/MIP-1 β	Flt-3 Ligand/Flt-3L/Flk-2L	IL-20/IL-10D	SLPI
CCL5/SCYA5/RANTES	Follistatin/FST	IL-21	ST2/IL-1R4/IL1RL1
CCL7/SCYA7/MCP-3/MARC	Galectin-1/Galaptin	IL-22/IL-TIF	Survivin/BIRC5
CCL8/SCYA8/MCP-2	GASP-1/WF1K1NRP	IL-23/IL-23p19	TGF-alpha/TGF- α /TGFA
CCL11/SCYA12/Eotaxin-1	G-CSF/CSF-3	IL-24/MDA-7	TGF-beta 1/TGF- β 1/TGFB
CCL13/SCYA13/MCP-4	GDF-15/MIC-1/PTGFB	IL-25/IL-17E	THPO/Thrombopoietin/MGDF
CCL14/SCYA14/HCC-1	GDNF/ATF-1	IL-27/IL-27A	TIM-1/HAVCR-1/KIM-1
CCL15/SCYA15/MIP-1 delta	GM-CSF/CSF-2	IL-28A/IFN-Lambda-2/IFN- λ 2	TIMP-1/TIMP1
CCL16/SCYA16/HCC-4	Gp130/sCD130/IL6ST	IL-29/IFN-Lambda-1/IFN- λ 1	TIMP-2/TIMP2
CCL17/SCYA17/TARC	Granzyme A/GZMA /CTLA3	IL-31	TNF-alpha/TNF- α
CCL18/SCYA18/PARC	Granzyme B/GZMB/CTL1	IL-32	TNF-beta/TNF- β /TNFSF1A/LTA
CCL19/SCYA19/MIP-3 β	HGF/Hepatopoietin A	IL-33/NFNEV/DVS27	TNFRSF1A/sCD120a/sTNF R1
CCL20/SCYA20/MIP-3 α	ICAM-1/sCD54	IL-34	TNFRSF1B/sCD120b/sTNF R2
CCL21/SCYA21/6CKine	ICAM-3/sCD50	IL-35	TNFRSF5/sCD40
CCL22/SCYA22/MDC	IFN- α 2	Insulin	TNFRSF6/sCD95/FasR
CCL23/SCYA23/MPIF-1	IFN- β	Keratin 19/KRT19/CK-19	TNFRSF9/sCD137/4-1BB
CCL24/SCYA24/Eotaxin-2	IFN- γ	Klotho/KLA/KL	TNFRSF10C/sCD264/TRAIL-R3
CCL25/SCYA25/TECK	IgA	LAP(TGF- β 1)/Latent TGF- β 1	TNFRSF13B/sCD267/TACI
CCL26/SCYA26/Eotaxin-3	IgE	Leptin/LEP	TNFRSF14/sCD270/HVEM
CCL27/SCYA27/CTAK	IgG1	LIF	TNFRSF17/BCMA/sCD269
CCL28/SCYA28/MEC	IgG2	Lipocalin-2/LCN2/NGAL	TNFSF5/sCD154/sCD40L
CD14/sCD14	IgG3	LL37/CAMP/CAP18/FALL39	TNFSF6/sCD178/sCD95L/FasL
CD163/M130/sCD163	IgG4	L-selectin/LECAM-1/sCD62L	TNFSF8/sCD153/sCD30L
CEACAM-1/CD66a	IGF1	Lymphotactin/XCL1/SCYC1	TNFSF10/sCD253/TRAIL
CEA/CEACAM-5/CD66e	IGF2	M-CSF/CSF1	TNFSF11/sCD254/RANKL
CNTF	IGFBP-1	MIA/CD-RAP	TNFSF12/TWEAK/Apo3 Ligand
CRP/C-Reactive Protein	IGFBP-2	Midkine/MK/NEGF2	TNFSF13/sCD256/APRIL
CX3CL1/Fractalkine	IGFBP-3	MIF	TNFSF14/sCD258/LIGHT
CXCL1/MGSA/GRO α	IGFBP-5	MMP-1/CLGN (Total)	TSLP
CXCL2/GRO β /MIP-2 α /GRO2	IGFBP-6	MMP-3/Stomelysin-1 (Total)	VCAM-1/sCD106
CXCL4/PF4	IGFBP-7	MMP-7/PUMP-1 (Total)	VEGF-A
CXCL5/SCYB5/ENA78	IL-1 α /IL1A/IL-1F1	MMP-8/Collagenase 2 (Total)	VEGF-C
CXCL6/GCP-3	IL-1 β /IL1B/IL-1F2	MMP-9/MANP2 (Total)	VEGF-D/FIGF
CXCL7/SCYB7/NAP-3	IL-1RA	MMP-13/Collagenase 3 (Total)	VEGFR1/Flt-1
CXCL9/MIG	IL-1R1/sCD121a	MPO	VEGFR2/Flk-1/sCD309/KDR
CXCL10/IP-10	IL-1R2/sCD121b	NCAM-1/sCD56	
CXCL11/I-TAC	IL-2	NOV/CCN3/IGFBP-9	

Mouse

Activin A	IL-2R α /sCD25
ANGPT-1/Angiopoietin-1	IL-3
BDNF	IL-4
beta-NGF/NGFB	IL-5
BlyS/BAFF/sCD257/TNFSF13B	IL-6
BTC/Betacellulin	IL-7
CCL2/SCYA2/MCP-1	IL-7R/IL-7Ra/sCD127
CCL3/SCYA3/MIP-1 α	IL-9
CCL4/SCYA4/MIP-1 β	IL-10/CSIF
CCL5/SCYA5/RANTES	IL-11
CCL7/SCYA7/MCP-3/MARC	IL-12/IL-23 p40
CCL8/MCP-2	IL-12p70
CCL9/CCL10/MRP2/MIP-1 γ	IL-13
CCL11/Eotaxin	IL-15
CCL12/MCP-5	IL-17A/CTLA-8
CCL17/SCYA17/TARC	IL-17F
CCL19/SCYA19/MIP-3 β	IL-20/IL-10D
CCL20/SCYA20/MIP-3 α	IL-21
CCL21/Exodus-3/6CKine	IL-22
CCL22/MDC/ABCD-1	IL-23p19
CCL24/Eotaxin-2/MPIF-2	IL-25/IL-17E
CCL27/SCYA27/CTAK	IL-28A/IFN-Lambda-2/IFN- λ 2
CCL28/MEC/CCK-1	IL-33/NFHEV/DVS27
CD14/sCD14	Leptin/LEP
CRP/C-Reactive Protein	LIF
CXCL1/GRO α /KC	L-selectin/sCD62L
CXCL2/GRO β /MIP2	M-CSF/CSF-1
CXCL5/SCYB5/ENA78	Nephrilysin/SNEP/sCD10
CXCL9/MIG	OPG/Osteoprotegerin
CXCL10/IP-10	OSM/Oncostatin M
CXCL13/BCA-1/BLC	P-selectin/LECAM3/sCD62P
CXCL14/BRAC/MIP-2 γ	RAGE/sRAGE/AGER
CXCL16/SCYA16/HCC-4	TGF-beta 1/TGF- β 1/TGFB
EGF	TIMP-1/TIMP1
Endoglin/sCD105	TNF-alpha/TNF- α
E-selectin/sCD62E	TNFR1/sCD120
FGF-1/FGF-acidic/HBGF1	TNFR2/sCD120b
FGF-2/FGF-basic/HBHG2	TNFRSF7/sCD27
FGF-9/HBGF-9/GAF	TNFRSF8/sCD30
G-CSF/CSF-3	TNFRSF12A/sCD266/TWEAK-R
GM-CSF/CSF-2	TNFSF5/sCD155/sCD40L
HGF/HPATA/SF	TNFSF8/sCD154/sCD30L
ICAM-1/CD54	TNFSF11/sCD254/RANKL
IFN- γ	TSLP
IFN- γ R1/IFNGR1/sCD119	VCAM-1/sCD106
IL-1 alpha/IL-1F1	VEGF-A
IL-1 beta/IL-1F2	VEGF-C
IL-1RA	VEGF-D/FIGF
IL-1R1/sCD121a	VEGFR1/Flt-1
IL-2	VEGFR2/Flk-1/sCD309/KDR

Rat

BDNF	IL-2
β -NGF/NGFB	IL-4
CCL2/SYCA2/MCP-1	IL-5
CCL3/SYCA3/MIP-1 α	IL-6
CCL5/SCYA5/RANTES	IL-10/CSIF
CCL7/SCYA7/MCP-3	IL-12p40
CCL11/Eotaxin	IL-12p70
CXCL1/Gro α /KC	IL-13
CXCL2/Gro β /MIP2	IL-15
CXCL6/SCYB6/GCP2	IL-17A/CTLA-8
CXCL10/IP-10	Leptin
CXCL12/SDF-1	PDGF-AB
G-CSF/CSF-3	TIMP-1
GM-CSF/CSF-2	TNF-alpha/TNF- α
ICAM-1/sCD54	TNFSF11/sCD254/RANKL
IFN γ	VCAM-1/sCD106
IL-1 α /IL-1F1	
IL-1 β /IL-1F2	

NHP

β -NGF/NGFB	IL-10/CSIF
CCL2/SYCA2/MCP-1	IL-12p70
CCL5/RANTES	IL-17A/CTLA-8
CCL7/MCP-3/MARC	TGF- α /TGF-type I
CCL11/Eotaxin	TNF- α
CXCL9/MIG	
CXCL10/IP-10	
CXCL12/SDF-1	
FGF basic/FGF-2	
IFN γ	
IL-1 β	
IL-1RA	
IL-2	
IL-4	
IL-5	
IL-6	
IL-8/CXCL8	

Canine

IFN γ
IL-2
IL-6
IL-8/CXCL8
IL-10/CSIF
IL-12p40
IL-17A
Insulin
MCP-1/JE/CCL2
SCF/MGF/KITLG
TNF α
VEGF

Sub-Categories

Human: Groups 1 – 10
Mouse: Groups 1 – 5
Rat: Groups 1 and 2
Non-Human Primate: Group 1
Canine: Group 1



*Please visit www.aimplexbio.com for the most up-to-date assay list.