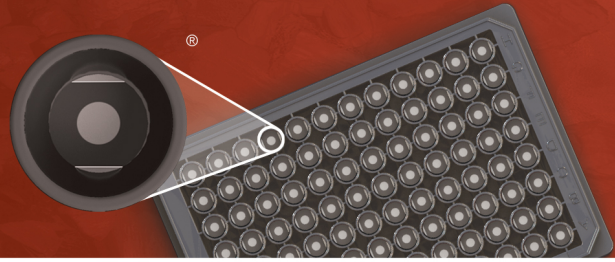
U-PLEX®

Human BAFF



www.mesoscale.com®

Ordering Information

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Company Address

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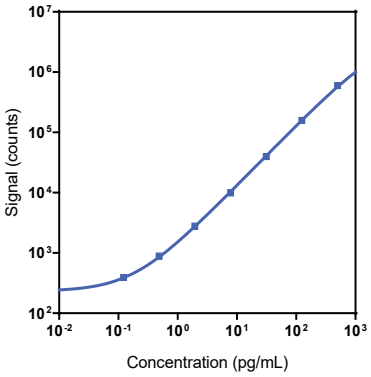
Product Options	Catalog Number	Description
Multiplex	K151ACL K151AEL	U-PLEX Metabolic Group 1 (hu) U-PLEX Immuno-oncology Group 1 (hu)
Singleplex	K1516CK-1/-2/-4	U-PLEX Human BAFF Assay with SECTOR™ plates
	K1516CK-21/-22/-24	U-PLEX Human BAFF Assay with QuickPlex® plates
Antibody Set	B216C-2/-3	U-PLEX Human BAFF Antibody Set
Protocol	U-PLEX® Product Inserts are available at www.mesoscale.com	

The U-PLEX platform was designed to provide ultimate flexibility for detection of biomarkers in a wide variety of sample types. This datasheet provides the representative performance of the U-PLEX Human BAFF Assay tested on U-PLEX plates run as a multiplex. The data do not represent the product specifications. Under your experimental conditions, the assay may perform differently from the representative data. U-PLEX assays are available in multiplex format with other compatible assays. The same assay can also be used to detect a single analyte using MSD GOLD™ Small Spot Streptavidin SECTOR or MSD GOLD Small Spot Streptavidin QuickPlex plates. See a U-PLEX product insert for instrument compatibility.

Representative Calibration Curve and Sensitivity



Assay	Median LLOD (pg/mL)	LLOD Range (pg/mL)
BAFF	0.05	0.05-0.07

The Calibrator curve was fitted with a 4-parameter logistic model with a $1/Y^2$ weighting. The lower limit of detection (LLOD) is a calculated concentration corresponding to 2.5X the standard deviations above the background (zero Calibrator).

Precision

Control	Average Conc. (pg/mL)	Average Intra-run Conc. (%CV)	Inter-run Conc. (%CV)
High	234	2.6	8.4
Mid	53	2.9	14.3
Low	0.91	16.6	22.2

Controls were made by spiking Calibrator into assay diluent at 3 levels within the quantitative range of the assay. Average intra-run concentration %CV is the average %CV of the control replicates within an individual run. Inter-run concentration %CV is the variability of controls across multiple runs.

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

MSD® U-PLEX Human BAFF

Tested Samples

Sample Type	Serum (N=12)	EDTA Plasma (N=12)	P800 Plasma (N=8)
Median (pg/mL)	145	98	193
Range (pg/mL)	74-219	54-191	98-268
% Detected	100	100	100

Normal serum, EDTA plasma, and P800 plasma samples were diluted 4-fold prior to the assay.

Dilution Linearity

Serum			EDTA Plasma			P800 Plasma			Cell Culture Media		
Fold Dilution	Average % Recovery	% Recovery Range	Fold Dilution	Average % Recovery	% Recovery Range	Fold Dilution	Average % Recovery	% Recovery Range	Fold Dilution	Average % Recovery	% Recovery Range
2	91	67-100	2	97	90-102	2	88	81-95	2	101	99-102
4	100	NA	4	100	NA	4	100	NA	4	100	NA
8	103	98-116	8	99	96-103	8	102	99-105	8	96	94-98
16	103	95-125	16	97	95-100	16	99	94-112	16	93	91-95

Normal human serum, EDTA plasma, P800 plasma, and cell culture media were spiked with Calibrator and tested at different dilutions. Percent recovery at each dilution level was normalized to the dilution-adjusted, 4-fold concentration. Samples may benefit from additional dilution with assay diluent to reduce matrix effects.

% Recovery = (measured concentration / expected concentration) x 100; NA = not applicable due to data being normalized to 4-fold dilution

Spike Recovery

	Serum		EDTA Plasma		P800 Plasma		Cell Culture Media	
Spike Level	Average % Recovery	% Recovery Range	Average % Recovery	% Recovery Range	Average % Recovery	% Recovery Range	Average % Recovery	% Recovery Range
High	95	76-105	101	92-107	97	89-103	103	99-108
Mid	100	86-108	101	97-108	102	98-105	104	102-106
Low	102	93-110	100	92-107	100	96-105	100	97-104

Normal serum, EDTA plasma, P800 plasma, and cell culture media were spiked with Calibrator at 3 levels. Spiked samples were diluted 4-fold to determine the expected concentration of the analyte. Samples may require additional dilution with assay diluent to reduce matrix effects.

% Recovery = (measured concentration / expected concentration) x 100

Specificity

To assess specificity, the BAFF Antibody Set was tested individually against a larger panel of analytes for nonspecific binding (BAFF, BAFF-R/TNFRSF13C, BCMA/TNFRSF17, BDNF, C-Peptide, CD20, CD27, CD28, CD40L (soluble), CD276/B7-H3, CTACK, CTLA-4, Desghrelin, ENA-78, Eotaxin, Eotaxin-2, Eotaxin-3, EPO, FGF (basic), FGF-23, FLT3L, Fractalkine, FSH, G-CSF, GITRL/TNFSF18, GITR/TNFRSF18, Ghrelin (Ser3-octanoylated), gp130 (soluble), GIP (1–42), GIP (3 42), GLP-1 (7–36), GLP-1 (9–36), GM-CSF, Granzyme A, Granzyme B, GRO-α, HAVCR2/TIM-3, I-309, IFN-α2a, IFN-β, IFN-γ, IL-1α, IL-1β, IL-1RA, IL-2, IL-2Rα, IL-3, IL-4, IL-5, IL-6, IL-7, IL-8, IL-9, IL-10, IL-12/IL-23p40, IL-12p70, IL-13, IL-15, IL-16, IL-17A, IL-17A/F, IL-17C, IL-17D, IL-17E/IL-25, IL-17F, IL-18, IL-21, IL-22, IL 23, IL-27, IL-29/IFN-λ1, IL 31, IL-33, Insulin, IP-10, I-TAC, LAG3, Leptin, LH, MCP-1, MCP-2, MCP-4, M-CSF, MDC, MIF, MIP-1α, MIP-1β, MIP-5, OX40/TNFRSF4, PD1, PD-L1, PD L2, PIGF, PP, Proinsulin, PYY (3-36), RANKL/TNFSF11, SDF-1α, Tie-2, TIGIT, TLR-1, TNF-α, TNF-β, TPO, TRAIL, TSLP, VEGF-A, VEGF-C, VEGF-D, and YKL-40). Nonspecific binding was less than 0.5%.

% Nonspecificity = (nonspecific signal / specific signal) x 100

Diluent Compatibility

The data included in this document has been collected with Assay Diluent 13 (supplemented with aprotinin and diprotin A) and Antibody Diluent 11. MSD offers a range of assay and antibody diluents for separate purchase. Depending on your assay needs, other diluents may be tested. Diprotin A should be purchased separately.

Assay Components

Calibrator: BAFF is included in Calibrator 14. The human BAFF Calibrator is a full length recombinant protein expressed in human cell line.
Antibodies: The U-PLEX Human BAFF Assay uses a mouse monoclonal antibody for capture and a mouse monoclonal antibody for detection.
Assay generation: B

Note: This datasheet contains representative assay performance data. In custom multiplex formats, the assay may perform differently from the representative data shown.