U-PLEX®

Human Fas (soluble)

www.mesoscale.com®

Ordering Information

MSD Customer Service Phone: 1-240-314-2795 Fax: 1-301-990-2776 Email: CustomerService@ mesoscale.com

Scientific Support

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Company Address

MESO SCALE DISCOVERY® A division of Meso Scale Diagnostics, LLC. 1601 Research Boulevard Rockville, MD 20850-3173 USA

Product Options	Catalog Number	Description	
Multiplex	K151AEM, K251AEM	U-PLEX Immuno-Oncology Group 1 (human)	
	K151AQCK-1/-2/-4	U-PLEX Human Fas (soluble) Assay with SECTOR™ plates	
Singleplex	K!51AQCK-21	U-PLEX Human Fas (soluble) Assay with QuickPlex® plates	
	K251AQCK-2/-4	U-PLEX Human Fas (soluble) with 384-well plates	
Antibody Set	B21AQC-2/-3	U-PLEX Human Fas (soluble) Antibody Set	
Protocol	U-PLEX Product Inserts are available at <u>www.mesoscale.com</u>		

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 Fas (soluble) 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 offered in either singleplex or multiplex; both are available on 96- or 384-well plates. See a U-PLEX product insert for instrument compatibility.

Representative Calibration Curve and Sensitivity



Assay	Median LLOD (pg/mL)	LLOD Range (pg/mL)	
Fas (soluble)	0.22	0.12-0.30	

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 2.5 standard deviations above the background (zero Calibrator).

Precision

Control	Average Conc. (pg/mL)	Average Intra-run Conc. (%CV)	Inter-run Conc. (%CV)
High	752	1.4	2.8
Mid	234	1.6	4.0
Low	73	2.2	5.5

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 Fas (soluble)

Tested Samples

Sample Type	Serum (N = 8)	EDTA Plasma (N = 8)	Citrate Plasma (N = 8)	Normal Lysate (N = 5)	Tumor Lysate (N = 15)
Median (pg/mL)	1,560	1,470	1,330	311	276
Range (pg/mL)	1,240–2,180	1,200–2,210	922-1,770	178–903	117–621
% Detected	100	100	100	100	100

Normal serum and plasma samples were diluted 4-fold prior to the assay. Lysates were tested at a protein concentration of 0.5 mg/mL.

Parallelism

Serum			EDTA Plasma		
Fold Dilution	Iution Average % Recovery % Recovery Range		Fold Dilution	Average % Recovery	% Recovery Range
50	105	102–113	50	104	100–111
200	96	90–99	200	94	88–98
400	91	84–98	400	87	81–91

Normal human serum and EDTA plasma were tested at different dilutions. Percent recovery at each dilution level was normalized to the dilution-adjusted, 100-fold concentration. Samples may benefit from additional dilution with assay diluent to reduce matrix effects.

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

Spike Recovery

	Serum		EDTA Plasma	
Spike Level	Average % Recovery % Recovery Range		Average % Recovery	% Recovery Range
High	105	83–158	106	83–161
Mid	105	83–160	105	86–155
Low	104	85–158	107	88–160

Normal serum and plasma were spiked with Calibrator at 3 levels. Spiked samples were diluted 4-fold to determine the expected concentration of the analyte. Samples may benefit from additional dilution with assay diluent to reduce matrix effects.

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

Specificity

The Fas (soluble) Antibody Set was tested for nonspecific binding against all of the analytes in the Immuno-Oncology Group 1 and the majority of analytes in Biomarker Group 1. Any cross-reactivity greater than 2.0% is noted below. The U-PLEX Assay Designer shows compatible assays.

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

Diluent Compatibility

Diluents 58 and 3 are provided when this is ordered in singleplex and multiplex assays.

Assay Components

Calibrator: Fas (soluble) is included in Calibrator 30. The human Fas (soluble) Calibrator is Fas (soluble) (1–173) recombinant protein expressed in a human cell line. **Antibodies:** The U-PLEX Human Fas (soluble) Assay uses a mouse monoclonal antibody for capture and a mouse monoclonal antibody for detection. **Assay generation:** A

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

Note: MSD recommends that samples be diluted 100-fold prior to analysis in this assay.

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