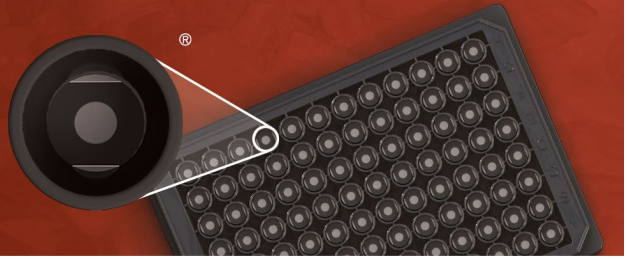
U-PLEX®

NHP TGF-β2



www.mesoscale.com®

Ordering Information

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Company Address

Meso Scale Discovery
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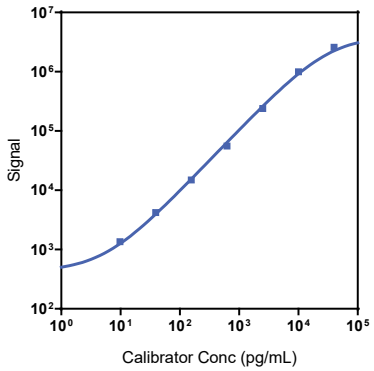
Product Options	Catalog Number	Description
Multiplex	K156ADM, K256ADM	U-PLEX Biomarker Group 2 (NHP)
Singleplex	K156XUK-1/-2/-4	U-PLEX NHP TGF-β2 Assay with SECTOR™ plates
	K156XUK-21/-22/-24	U-PLEX NHP TGF-β2 Assay with QuickPlex Ultra™ plates
	K256XUK-2/-4	U-PLEX NHP TGF-β2 Assay with 384-well plates
Antibody Set	B20XU-2/-3	U-PLEX TGF-β2 Antibody Set
Protocol	U-PLEX Product Inserts are available at www.mesoscale.com	

The MESO SCALE DISCOVERY® 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® NHP TGF-β2 Assay tested on U-PLEX 96-well SECTOR 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 in 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)
TGF-β2	2.5	1.9-2.6

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	5,200	4.7	10.7
Mid	515	4.8	12.6
Low	69	7.2	12.6

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.

Tested Samples

	Sample Type	Serum (N=12)	Plasma (N=12)
Cynomolgus Monkey	Median (pg/mL)	1,040	78
	Range (pg/mL)	394-2,200	31-337
	% Detected	90	100
Rhesus Monkey	Median (pg/mL)	730	153
	Range (pg/mL)	268-2,230	32-418
	% Detected	100	100

Normal serum, EDTA plasma, and cell culture media were diluted 2-fold prior to the assay. Samples were prepared using an acidification step.

Dilution Linearity

	Serum			EDTA Plasma			Cell Culture Media		
	Fold Dilution	Average % Recovery	% Recovery Range	Fold Dilution	Average % Recovery	% Recovery Range	Fold Dilution	Average % Recovery	% Recovery Range
Cynomolgus Monkey	2	138	132-145	2	132	120-150	2	78	74-86
	4	169	154-191	4	153	126-193	4	75	71-80
	8	192	166-228	8	177	142-250	8	68	59-76
Rhesus Monkey	2	136	122-158	2	154	134-173	2	78	74-86
	4	164	135-213	4	199	161-252	4	75	71-80
	8	187	142-261	8	241	170-353	8	68	59-76

Normal serum, EDTA plasma, and cell culture media were spiked with Calibrator and tested at different dilutions. Undiluted samples were tested 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

Spike Recovery

	Serum		EDTA Plasma		Cell Culture Media	
	Spike Level	Average % Recovery	% Recovery Range	Average % Recovery	% Recovery Range	Average % Recovery	% Recovery Range
Cynomolgus Monkey	High	46	27-39	42	32-51	123	109-136
	Mid	41	24-33	35	28-43	114	103-129
	Low	38	22-33	33	25-40	110	102-118
Rhesus Monkey	High	34	16-39	22	6-43	123	109-136
	Mid	34	16-37	21	7-41	114	103-129
	Low	33	15-38	20	4-39	110	102-118

Normal serum, EDTA plasma, and cell culture media were spiked with Calibrator at 3 levels. Undiluted samples were tested 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

To assess specificity, the TGF-β2 Antibody Set was tested individually against a panel of NHP analytes for nonspecific binding (TGF-β1, TGF-β2, and TGF-β3). Nonspecific binding was less than 0.5%.

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

It is recommended that acid-treated samples are used for evaluation of TGF-β2. Samples may benefit from an additional dilution prior to measurement to ensure TGF-β2 levels are in the quantitative range of the assay.

Diluent Compatibility

Diluents 57 and 3 are provided with this assay. MSD offers a range of assay and antibody diluents for separate purchase. Depending on your assay needs, other diluents may be tested.

Assay Components

Calibrator: TGF-β2 is included in Calibrator 11. The TGF-β2 Calibrator is a full-length recombinant protein expressed in *E. coli*.
Antibodies: The U-PLEX NHP TGF-β2 Assay uses a mouse monoclonal antibody for capture and a goat polyclonal antibody for detection.
Assay generation: A

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