



# NHP TGF- $\beta$ 3



[www.mesoscale.com](http://www.mesoscale.com)

## Ordering Information

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## Scientific Support

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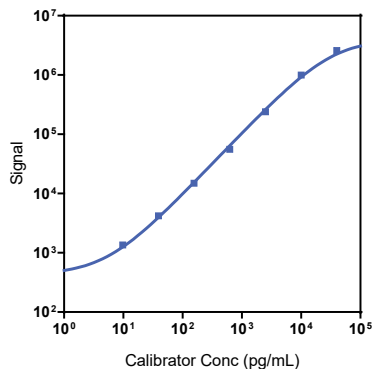
## Company Address

Meso Scale Discovery  
A division of  
Meso Scale Diagnostics, LLC.  
1601 Research Boulevard  
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Product Options	Catalog Number	Description
Multiplex	K156ADM, K256ADM	U-PLEX Biomarker Group 2 (NHP)
	K156XVK-1/-2/-4	U-PLEX NHP TGF- $\beta$ 3 Assay with SECTOR™ plates
Singleplex	K156XVK-21/-22/-24	U-PLEX NHP TGF- $\beta$ 3 Assay with QuickPlex Ultra™ plates
	K256XVK-2/-4	U-PLEX NHP TGF- $\beta$ 3 Assay with 384-well plates
Antibody Set	B20XV-2/-3	U-PLEX TGF- $\beta$ 3 Antibody Set
Protocol	U-PLEX Product Inserts are available at <a href="http://www.mesoscale.com">www.mesoscale.com</a>	

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- $\beta$ 3 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- $\beta$ 3	1.4	1.1-1.4

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	4,010	4.1	10.2
Mid	425	5.0	10.7
Low	54	4.8	13.4

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 TGF-β3

## Tested Samples

	Sample Type	Serum (N=12)	Plasma (N=12)
Cynomolgus Monkey	Median (pg/mL)	NA	NA
	Range (pg/mL)	NA	NA
	% Detected	0	0
Rhesus Monkey	Median (pg/mL)	NA	NA
	Range (pg/mL)	NA	NA
	% Detected	0	0

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

NA = not applicable due to 0% detected

## Dilution Linearity

	Serum			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	160	152-167	2	177	146-203	2	83	78-88
	4	226	199-246	4	254	185-331	4	77	73-83
	8	294	243-326	8	349	242-508	8	71	62-81
Rhesus Monkey	2	171	149-231	2	170	155-185	2	83	78-88
	4	250	183-419	4	233	196-263	4	77	73-83
	8	331	215-636	8	297	231-342	8	71	62-81

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.

$$\% \text{ Recovery} = (\text{measured concentration} / \text{expected concentration}) \times 100$$

## Spike Recovery

	Spike Level	Serum		Plasma		Cell Culture Media	
		Average % Recovery	% Recovery Range	Average % Recovery	% Recovery Range	Average % Recovery	% Recovery Range
Cynomolgus Monkey	High	20	14-27	23	19-31	115	103-119
	Mid	19	14-27	21	17-29	108	100-116
	Low	18	13-25	21	16-30	105	100-112
Rhesus Monkey	High	40	18-60	26	Dec-37	115	103-119
	Mid	37	18-55	27	Dec-38	108	100-116
	Low	37	18-52	26	Dec-37	105	100-112

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.

$$\% \text{ Recovery} = (\text{measured concentration} / \text{expected concentration}) \times 100$$

# MSD U-PLEX NHP TGF-β3

## Specificity

To assess specificity, the TGF-β3 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%.

$$\% \text{ Nonspecificity} = (\text{nonspecific signal} / \text{specific signal}) \times 100$$

It is recommended that acid-treated samples are used for evaluation of TGF-β3.

## 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-β3 is included in Calibrator 11. The TGF-β3 Calibrator is a full-length recombinant protein expressed in *E. coli*.

**Antibodies:** The U-PLEX NHP TGF-β3 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.

