# U-PLEX®

# NHP TGF-β2

www.mesoscale.com®


### Ordering Information

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### Company Address

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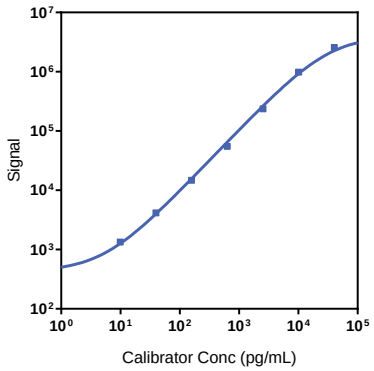
| Product Options | Catalog Number | Description |
|---|---|---|
| Multiplex | K156ADM, K256ADM | U-PLEX Biomarker Group 2 (NHP) |
| Singleplex | K156XUK-1/-2/-4 | U-PLEX NHP TGF-β2 Assay with SECTOR™ plates |
| | K156XUK-21/-22/-24 | U-PLEX NHP TGF-β2 Assay with QuickPlex® plates |
| | K256XUK-2/-4 | 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 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 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.


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

# MSD® U-PLEX TGF-β2

## 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 and EDTA plasma samples were tested without dilution 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 Dilutio | Average % Recovery | % Recovery Range | Fold Dilutio | 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

# MSD U-PLEX NHP TGF-β2

## 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.

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