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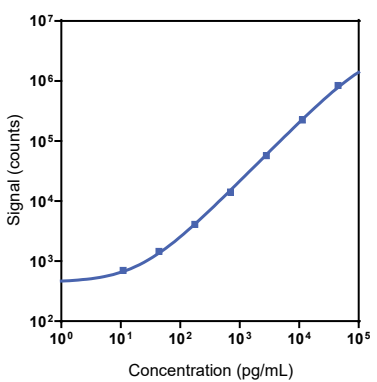
Company Address

MESO SCALE DISCOVERY®
 A division of
 Meso Scale Diagnostics, LLC.
 1601 Research Boulevard
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| Product Options | Catalog Number | Description |
|-----------------|--|--|
| Multiplex | K151AEM, K251AEM | U-PLEX Immuno-Oncology Group 1 (human) |
| | K151J7K-1/-2/-4 | U-PLEX Human TLR1 Assay with SECTOR™ plates |
| Singleplex | K151J7K-21/-22/-24 | U-PLEX Human TLR1 Assay with QuickPlex® plates |
| | K251J7K-2/-4 | U-PLEX Human TLR1 Assay with 384-well plates |
| Antibody Set | B21J7-2/-3 | U-PLEX Human TLR1 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 TLR1 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 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) |
|-------|---------------------|--------------------|
| TLR1 | 4.4 | 1.8-6.4 |

The Calibrator curve was fitted with a 4-parameter logistic model with a 1/Y² 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 | 6,940 | 3.8 | 5.8 |
| Mid | 1,390 | 3.4 | 8.5 |
| Low | 264 | 5.4 | 13.1 |

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 TLR1

Tested Samples

| Sample Type | Serum (N=10) | EDTA Plasma (N=10) | Normal Lysate (N=5) | Tumor Lysate (N=5) |
|----------------|--------------|--------------------|---------------------|--------------------|
| Median (pg/mL) | 39 | 40 | 38 | 611 |
| Range (pg/mL) | 20-59 | 26-124 | 18-71 | 54-719 |
| % Detected | 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.

Dilution Linearity

| Serum | | | EDTA Plasma | | |
|---------------|--------------------|------------------|---------------|--------------------|------------------|
| Fold Dilution | Average % Recovery | % Recovery Range | Fold Dilution | Average % Recovery | % Recovery Range |
| 2 | 84 | 75 - 91 | 2 | 87 | 81 - 93 |
| 8 | 112 | 105 - 126 | 8 | 107 | 102 - 111 |
| 16 | 115 | 101 - 148 | 16 | 108 | 102 - 115 |

Normal human serum and EDTA plasma 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.

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

Spike Recovery

| Spike Level | Serum | | EDTA Plasma | |
|-------------|--------------------|------------------|--------------------|------------------|
| | Average % Recovery | % Recovery Range | Average % Recovery | % Recovery Range |
| High | 78 | 61 - 92 | 77 | 42 - 93 |
| Mid | 66 | 38 - 91 | 79 | 41 - 95 |
| Low | 94 | 55 - 154 | 76 | 40 - 91 |

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.

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

Specificity

The TLR1 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 all of the compatible assays.

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

Diluent Compatibility

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

Assay Components

Calibrator: TLR1 is included in Calibrator 20. The human TLR1 Calibrator is TLR1 (22–578) expressed in a mouse cell line.

Antibodies: The U-PLEX Human TLR1 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 from the representative data shown.

