

www.mesoscale.com<sup>®</sup>

**Ordering Information**

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

**Scientific Support**

Phone: 1-240-314-2798  
 Email: ScientificSupport@mesoscale.com

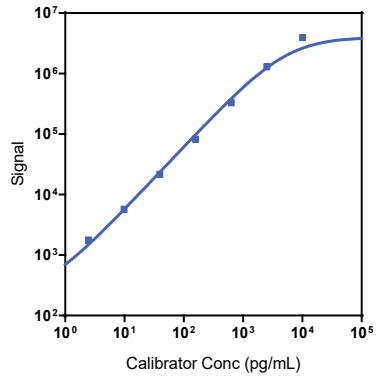
**Company Address**

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

| Product Options     | Catalog Number   | Description  |
|---------------------|--|--|
| <b>Multiplex</b>    | K15067L  | U-PLEX Biomarker Group 1 (hu)                              |
|                     | K151AEL  | U-PLEX Immuno-oncology Group 1 (hu)                        |
|                     | K151ACL  | U-PLEX Metabolic Group 1 (hu)                              |
| <b>Singleplex</b>   | K151WHK-1/-2/-4  | U-PLEX Human TSLP Assay with SECTOR <sup>™</sup> plates    |
|                     | K151WHK-21/-22/-24   | U-PLEX Human TSLP Assay with QuickPlex <sup>®</sup> plates |
| <b>Antibody Set</b> | B21WH-2/-3   | U-PLEX Human TSLP Antibody Set                             |
| <b>Protocol</b>     | U-PLEX <sup>®</sup> Product Inserts are available at <a href="http://www.mesoscale.com">http://www.mesoscale.com</a> |  |

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 TSLP 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 available in multiplex format with other compatible assays. The same assay can also be used to detect a single analyte using MSD GOLD<sup>™</sup> Small Spot Streptavidin SECTOR or MSD GOLD Small Spot Streptavidin QuickPlex plates. See a U-PLEX product insert for instrument compatibility.

**Representative Calibration Curve and Sensitivity**



| Assay | Median LLOD (pg/mL) | LLOD Range (pg/mL) |
|-------|---------------------|--------------------|
| TSLP  | 0.20                | 0.13-0.21          |

The Calibrator curve was fitted with a 4-parameter logistic model with a 1/Y<sup>2</sup> 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    | 2,420                 | 4.3                           | 9.5                   |
| Mid     | 266                   | 4.6                           | 11.0                  |
| Low     | 29                    | 3.5                           | 16.2                  |

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 TSLP

## Tested Samples

| Sample Type    | Serum (N=8) | Plasma (N=8) |
|----------------|-------------|--------------|
| Median (pg/mL) | 0.69        | 0.22         |
| Range (pg/mL)  | 0.31-2.3    | ND-0.79      |
| % Detected     | 100         | 38           |

Normal serum and plasma samples were diluted 4-fold prior to the assay. ND = non-detectable (<LLOD)

## Dilution Linearity

| Serum         |                    |                  | EDTA Plasma   |                    |                  |
|---------------|--------------------|------------------|---------------|--------------------|------------------|
| Fold Dilution | Average % Recovery | % Recovery Range | Fold Dilution | Average % Recovery | % Recovery Range |
| 2             | 104                | 93-120           | 2             | 139                | 105-161          |
| 4             | 106                | 94-124           | 4             | 149                | 108-167          |
| 8             | 103                | 93-121           | 8             | 152                | 109-169          |

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.

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

## Spike Recovery

| Spike Level | Serum              |                  | EDTA Plasma        |                  |
|-------------|--------------------|------------------|--------------------|------------------|
|             | Average % Recovery | % Recovery Range | Average % Recovery | % Recovery Range |
| High        | 101                | 95-107           | 82                 | 55-91            |
| Mid         | 102                | 96-111           | 83                 | 70-94            |
| Low         | 106                | 103-109          | 90                 | 79-97            |

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 require additional dilution with assay diluent to reduce matrix effects.

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

## Specificity

To assess specificity, the TSLP Antibody Set was tested individually against a larger panel of analytes for nonspecific binding (BAFF, BAFF-R/TNFRSF13C, BCMA/TNFRSF17, BDNF, C-Peptide, CD20, CD27, CD28, CD40L (soluble), CD276/B7-H3, CTACK, CTLA-4, Desghrelin, ENA-78, Eotaxin, Eotaxin-2, Eotaxin-3, EPO, FGF (basic), FGF-23, FLT3L, Fractalkine, FSH, G-CSF, GITR/TNFRSF18, GPCR/TNFRSF18, Ghrelin (Ser3-octanoylated), gp130 (soluble), GIP (1-42), GIP (3-42), GLP-1 (7-36), GLP-1 (9-36), GM-CSF, Granzyme A, Granzyme B, GRO- $\alpha$ , HAVCR2/TIM-3, I-309, IFN- $\alpha$ 2a, IFN- $\beta$ , IFN- $\gamma$ , IL-1 $\alpha$ , IL-1 $\beta$ , IL-1RA, IL-2, IL-2R $\alpha$ , IL-3, IL-4, IL-5, IL-6, IL-7, IL-8, IL-9, IL-10, IL-12/IL-23p40, IL-12p70, IL-13, IL-15, IL-16, IL-17A, IL-17A/F, IL-17C, IL-17D, IL-17E/IL-25, IL-17F, IL-18, IL-21, IL-22, IL 23, IL-27, IL-29/IFN- $\lambda$ 1, IL 31, IL-33, Insulin, IP-10, I-TAC, LAG3, Leptin, LH, MCP-1, MCP-2, MCP-4, M-CSF, MDC, MIF, MIP-1 $\alpha$ , MIP-1 $\beta$ , MIP-5, OX40/TNFRSF4, PD1, PD-L1, PD L2, PIGF, PP, Proinsulin, PYY (3-36), RANKL/TNFRSF11, SDF-1 $\alpha$ , Tie-2, TIGIT, TLR-1, TNF- $\alpha$ , TNF- $\beta$ , TPO, TRAIL, TSLP, VEGF-A, VEGF-C, VEGF-D, and YKL-40). Nonspecific binding was less than 0.5%.

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

## Diluent Compatibility

The data included in this document has been collected with Assay Diluent 43 (supplemented with aprotinin and diprotin A) and Antibody Diluent 3. MSD offers a range of assay and antibody diluents for separate purchase. Depending on your assay needs, other diluents may be tested. Diprotin A should be purchased separately.

## Assay Components

**Calibrator:** TSLP is included in Calibrator 6. The TSLP Calibrator is a full length recombinant protein expressed in *E. coli*.

**Antibodies:** The U-PLEX Human TSLP 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.

