



Human VCAM-1

www.mesoscale.com®

Ordering Information

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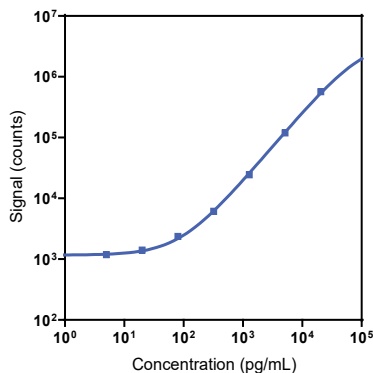
Company Address

Meso Scale Discovery
 A division of
 Meso Scale Diagnostics, LLC.
 1601 Research Boulevard
 Rockville, MD 20850-3173 USA

| Product Options | Catalog Number | Description |
|-----------------|--|--|
| Multiplex | K151AGM, K251AGM | U-PLEX Biomarker Group 3 (human) |
| | K151H9K-1/-2/-4 | U-PLEX Human VCAM-1 Assay with SECTOR™ plates |
| Singleplex | K151H9K-21/-22/-24 | U-PLEX Human VCAM-1 Assay with QuickPlex Ultra™ plates |
| | K251H9K-2/-4 | U-PLEX Human VCAM-1 Assay with 384-well plates |
| Antibody Set | B21H9-2/-3 | U-PLEX Human VCAM-1 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® Human VCAM-1 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) |
|--------|---------------------|--------------------|
| VCAM-1 | 7.8 | 7.1-9.0 |

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 the signal 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 | 2,220 | 6.1 | 9.7 |
| Mid | 894 | 2.7 | 6.6 |
| Low | 352 | 2.3 | 9.2 |

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 VCAM-1

Tested Samples

| Sample Type | Serum (N=10) | EDTA Plasma (N=10) | Citrate Plasma (N=5) |
|----------------|--------------|--------------------|----------------------|
| Median (µg/mL) | 0.51 | 0.45 | 0.59 |
| Range (µg/mL) | 0.37-0.68 | 0.29-0.54 | 0.46-0.93 |
| % Detected | 100 | 100 | 100 |

Normal serum, EDTA plasma, and citrate plasma samples were diluted 4,000-fold prior to the assay.

Parallelism

| Serum | | | EDTA Plasma | | |
|---------------|--------------------|------------------|---------------|--------------------|------------------|
| Fold Dilution | Average % Recovery | % Recovery Range | Fold Dilution | Average % Recovery | % Recovery Range |
| 2,000 | 91 | 85-101 | 2,000 | 93 | 81-102 |
| 8,000 | 96 | 81-104 | 8,000 | 101 | 94-110 |
| 16,000 | 90 | 78-104 | 16,000 | 93 | 78-103 |

Normal human serum and EDTA plasma were tested at different dilutions. Percent recovery at each dilution level was normalized to the concentration of 4,000-fold diluted samples.

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

Specificity

To assess specificity, the VCAM-1 Antibody Set was tested individually against a larger panel of analytes for nonspecific binding (A2M, Adiponectin, ApoA1, ApoC3, CA1, Clusterin, Complement C9, Complement factor D, CRP, Cystatin C, DPPIV, Factor VII, ICAM-1, NGAL/LCN2, RBP4, SAA, Serpin A1, SHBG, sTfR-1, VCAM-1, vWF). Nonspecific binding was less than 0.5%.

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

Diluent Compatibility

The data included in this document have been collected with Assay Diluent 12 and Antibody Diluent 11. 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: VCAM-1 is included in Calibrator 24. The human VCAM-1 Calibrator is a full-length recombinant protein expressed in a hamster cell line.

Antibodies: The U-PLEX Human VCAM-1 Assay uses a mouse monoclonal antibody for capture and a sheep 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.

Note: MSD recommends that samples be diluted 4,000-fold prior to analysis in this assay.

