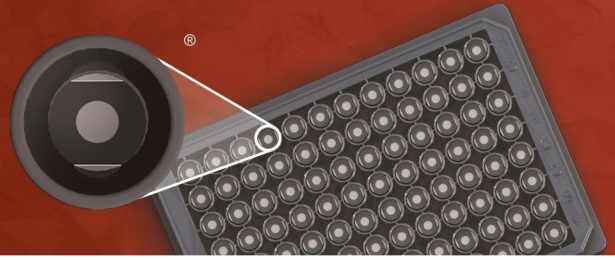
U-PLEX®

# Human ICOS-L/B7-H2



www.mesoscale.com®

## Ordering Information

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## Company Address

MESO SCALE DISCOVERY®
A division of
Meso Scale Diagnostics, LLC.
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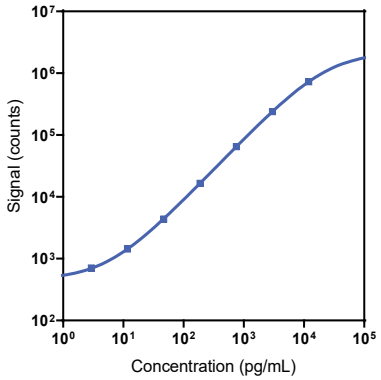
| Product Options | Catalog Number | Description |
|---|---|---|
| Multiplex | K151AEM, K251AEM | U-PLEX Immuno-Oncology Group 1 (human) |
| Singleplex | K151AHJK-1/-2/-4 | U-PLEX Human ICOS-L/B7-H2 Assay with SECTOR™ plates |
| | K151AHJK-21/-22/-24 | U-PLEX Human ICOS-L/B7-H2 Assay with QuickPlex® plates |
| | K251AHJK-2/-4 | U-PLEX Human ICOS-L/B7-H2 Assay with 384-well plates |
| Antibody Set | B21AHJ-2/-3 | U-PLEX Human ICOS-L/B7-H2 Antibody Set |
| Protocol | U-PLEX Product Inserts are available at www.mesoscale.com. | |

The U-PLEX® platform was designed to provide ultimate flexibility for the detection of biomarkers in a wide variety of sample types. This datasheet provides the representative performance of the U-PLEX Human ICOS-L/B7-H2 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) |
|---|---|---|
| ICOS-L/B7-H2 | 0.98 | 0.58–2.8 |

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 2.5 standard deviations above the background (zero Calibrator).

## Precision

| Control | Average Conc. (pg/mL) | Average Intra-run Conc. (%CV) | Inter-run Conc. (%CV) |
|---|---|---|---|
| High | 2,000 | 4.1 | 6.7 |
| Mid | 441 | 2.1 | 6.1 |
| Low | 89 | 2.4 | 8.9 |

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.

# MSD® U-PLEX Human ICOS-L/B7-H2

## Tested Samples

| Sample Type | Serum (N = 9) | EDTA Plasma (N = 9) | Citrate Plasma (N = 9) | Normal Lysate (N = 5) | Tumor Lysate (N = 5) |
|---|---|---|---|---|---|
| Median (pg/mL) | 139,000 | 138,000 | 111,000 | 701 | 703 |
| Range (pg/mL) | 94,300–174,000 | 95,500–174,000 | 78,500–145,000 | 337–1,170 | 349–2,360 |
| % Detected | 100 | 100 | 100 | 100 | 100 |

Normal serum and plasma samples were diluted 100-fold prior to testing in the assay. Lysates were tested at a protein concentration of 0.5 mg/mL.

## Parallelism

| Serum | | | EDTA Plasma | | |
|---|---|---|---|---|---|
| Fold Dilution | Average % Recovery | % Recovery Range | Fold Dilution | Average % Recovery | % Recovery Range |
| 50 | 96 | 90–102 | 50 | 92 | 87–98 |
| 200 | 103 | 99–110 | 200 | 104 | 94–110 |
| 400 | 105 | 100–109 | 400 | 111 | 96–122 |

Samples were tested at different dilutions. One hundred-fold diluted samples were tested to determine the expected concentration of the analyte.

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

## Spike Recovery

| | Serum | | EDTA Plasma | |
|---|---|---|---|---|
| Spike Level | Average % Recovery | % Recovery Range | Average% Recovery | % Recovery Range |
| High | 99 | 57–118 | 98 | 65–117 |
| Mid | 113 | 88–127 | 103 | 100–109 |
| Low | 101 | 92–110 | 94 | 79–103 |

Samples were diluted 100-fold prior to addition of spike. The expected concentration of the analyte in spiked samples was calculated by addition of the Calibrator spike concentration to the unspiked sample concentration.

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

## Specificity

The ICOS-L/B7-H2 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.

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

The ICOS-L/B7-H2 analyte interacted with the Nectin-4 detection antibody (4.4%). We do not recommend multiplexing the ICOS-L/B7-H2 assay with the Nectin-4 assay.

## Diluent Compatibility

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

## Assay Components

**Calibrator:** ICOS-L/B7-H2 is included in Calibrator 29. The human ICOS-L/B7-H2 Calibrator is a full-length recombinant protein expressed in a human cell line.
**Antibodies:** The U-PLEX Human ICOS-L/B7-H2 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.

**Note:** MSD recommends that samples be diluted 100-fold prior to analysis in this assay.