

Human E-Cadherin



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Ordering Information

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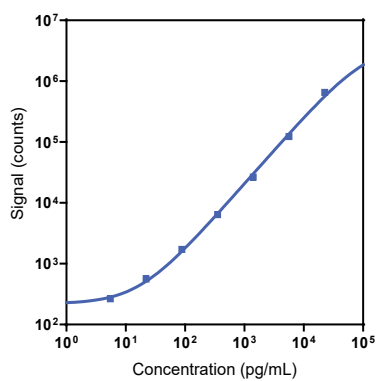
Company Address

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 (hu)
Singleplex	K151AQBK-1/-2/-4	U-PLEX Human E-Cadherin Assay with SECTOR [™] plates
	K251AQBK-2/-4	U-PLEX Human E-Cadherin with 384-well plates
Antibody Set	B21AQB-2/-3	U-PLEX Human E-Cadherin 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 E-Cadherin 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 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)
E-Cadherin	6.8	4.2-12

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	10,300	2.9	3.5
Mid	2,767	1.7	3.7
Low	778	1.8	4.6

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 Human E-Cadherin

Tested Samples

Sample Type	Serum (N=8)	EDTA Plasma (N=8)	Citrate Plasma (N=8)	Nnormal Lysate (N=5)	Tumor Lysate (N=15)
Median (pg/mL)	264,000	222,000	221,000	36,200	33,200
Range (pg/mL)	136,000–424,000	116,000–380,000	98,700–316,000	4,710–45,200	2,050–236,000
% Detected	100	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.

Parallelism

Serum			EDTA Plasma		
Fold Dilution	Average % Recovery	% Recovery Range	Fold Dilution	Average % Recovery	% Recovery Range
50	128	125–133	50	127	120–136
200	84	75–89	200	85	81–89
400	79	71–86	400	79	72–85

Normal human serum and EDTA plasma were tested at different dilutions. Percent recovery at each dilution level was normalized to the dilution-adjusted, 100-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	121	97–166	119	100–174
Mid	115	102–148	113	100–153
Low	108	92–135	108	98–139

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 E-Cadherin 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 compatible assays.

The E-Cadherin detection antibody nonspecifically binds to the BAFF-R/TNFRSF13C (26%), CD276/B7-H3 (27%), CD28 (27%), HAVCR2/TIM-3 (3.9%), ICOS (10%), TACI/TNFRSF13 (7.7%), TLR1 (4.0%), and Tie-2 (2.3%) analytes. We do not recommend multiplexing the E-Cadherin assay with these assays on the same plate.

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

Diluent Compatibility

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

Assay Components

Calibrator: E-Cadherin is included in Calibrator 30. The human E-Cadherin Calibrator is E-Cadherin (155–707) recombinant protein expressed in a human cell line.

Antibodies: The U-PLEX Human E-Cadherin 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.

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

