



www.mesoscale.com®

Ordering Information

MSD 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

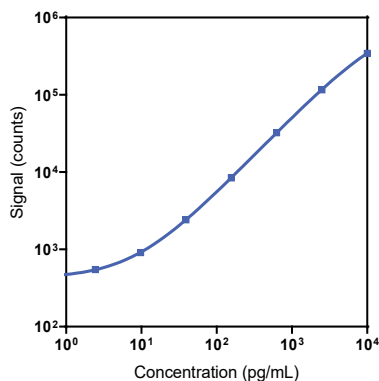
Company Address

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

Product Options	Catalog Number	Description
Multiplex	K151AEM, K251AEM	U-PLEX Immuno-Oncology Group 1 (human)
Singleplex	K151AHFK-1/-2/-4	U-PLEX Human Nectin-4 Assay with SECTOR™ plates
	K151AHFK-21/-22/-24	U-PLEX Human Nectin-4 Assay with QuickPlex® plates
	K251AHFK-2/-4	U-PLEX Human Nectin-4 Assay with 384-well plates
Antibody Set	B21AHF-2/-3	U-PLEX Human Nectin-4 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 Nectin-4 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)
Nectin-4	1.61	1.07–2.85

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	1,390	2.6	4.9
Mid	457	1.9	5.3
Low	139	2.9	9.1

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 Nectin-4

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)	521	502	405	156	448
Range (pg/mL)	396–660	394–663	330–553	60–1,200	ND–7,000
% Detected	100	100	100	100	80

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. ND = non-detectable (<LLOD).

Dilution Linearity

Serum			EDTA Plasma		
Fold Dilution	Average % Recovery	% Recovery Range	Fold Dilution	Average % Recovery	% Recovery Range
2	97	95–101	2	94	92–100
8	100	97–102	8	99	97–102
16	99	94–104	16	99	97–101

Samples were spiked with calibrator and serially diluted. Percent recovery at each dilution 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	102	96–107	101	92–107
Mid	107	102–112	104	89–110
Low	108	104–114	106	101–113

Samples were spiked with calibrator at three levels within the range of the assay. Percent recovery was calculated as $\% \text{ Recovery} = (\text{measured concentration} / (\text{spike} + \text{endogenous concentrations})) \times 100$.

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

Specificity

The Nectin-4 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.

The Nectin-4 capture antibody interacted nonspecifically with IL-17A/F analyte (3.0%). The Nectin-4 detection antibody interacted nonspecifically with IL-17F (4.8%), ICOS-L/B7-H2 (4.4%) and LAG-3 (6.3%) analytes.

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

Diluent Compatibility

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

Assay Components

Calibrator: Nectin-4 is included in Calibrator 28. The human Nectin-4 Calibrator is a full-length recombinant protein expressed in a mouse cell line.

Antibodies: The U-PLEX Human Nectin-4 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.

