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## Ordering Information

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## Scientific Support

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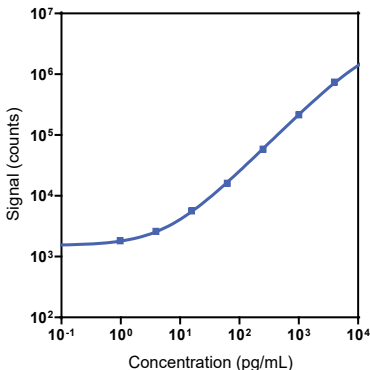
## Company Address

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

Product Options	Catalog Number	Description
<b>Multiplex</b>	K151AGM, K251AGM	U-PLEX Biomarker Group 3 (human)
<b>Singleplex</b>	K151Z1K-1/-2/-4	U-PLEX Human NGAL/LCN2 Assay with SECTOR™ plates
	K151Z1K-21/-22/-24	U-PLEX Human NGAL/LCN2 Assay with QuickPlex Ultra™ plates
	K251Z1K-2/-4	U-PLEX Human NGAL/LCN2 Assay with 384-well plates
<b>Antibody Set</b>	B21Z1-2/-3	U-PLEX Human NGAL/LCN2 Antibody Set
<b>Protocol</b>	U-PLEX Product Inserts are available at <a href="http://www.mesoscale.com">www.mesoscale.com</a>	

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 NGAL/LCN2 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)
NGAL/LCN2	0.78	0.72-3.4

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 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	496	4.8	6.6
Mid	102	3.3	6.5
Low	18	4.0	14.0

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 NGAL/LCN2

## Tested Samples

Sample Type	Serum (N=10)	EDTA Plasma (N=10)	Citrate Plasma (N=5)
Median (µg/mL)	0.06	0.06	0.07
Range (µg/mL)	0.04-0.08	0.04-0.09	0.04-0.10
% 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	92	64-107	2,000	85	30-102
8,000	95	70-111	8,000	96	79-115
16,000	103	69-126	16,000	96	75-128

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 NGAL/LCN2 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:** NGAL/LCN2 is included in Calibrator 25. The human NGAL/LCN2 Calibrator is a full-length recombinant protein expressed in a mouse cell line.

**Antibodies:** The U-PLEX Human NGAL/LCN2 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 4,000-fold prior to analysis in this assay.

