

Human GRO-α



www.mesoscale.com®

Ordering Information

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Scientific Support

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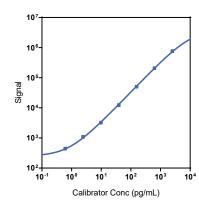
Company Address

MESO SCALE DISCOVERY®
A division of
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| Product Options | Catalog Number | Description | |
|-----------------|--|--|--|
| Multiplex | K15067M, K25067M K151AEM, K251AEM K151ACM, K251ACM | U-PLEX Biomarker Group 1 (human) U-PLEX Immuno-Oncology Group 1 (human) U-PLEX Metabolic Group 1 (human) | |
| | K151UXK-1/-2/-4 | U-PLEX Human GRO- α Assay with SECTOR TM plates | |
| Singleplex | K151UXK-21 | U-PLEX Human GRO- α Assay with QuickPlex $\!\!^{\text{\tiny B}}$ APT plates | |
| | K251UXK-2/-4 | U-PLEX Human GRO- α Assay with 384-well plates | |
| Antibody Set | B21UX-2/-3 | U-PLEX Human GRO- α Antibody Set | |
| Protocol | U-PLEX Product Inserts are available at http://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 GRO- α 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) | |
|-------|------------------------|-----------------------|--|
| GRO-α | 0.25 | 0.21-0.25 | |

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 | 326 | 4.4 | 11.5 |
| Mid | 88 | 4.0 | 10.5 |
| Low | 23 | 4.0 | 11.2 |

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 GRO-α

Tested Samples

| Sample Type | Serum (N=10) | Plasma (N=10) | |
|----------------|-----------------|------------------|--|
| Median (pg/mL) | 43 | 113 | |
| Range (pg/mL) | 17-88 | 36-326 | |
| % Detected | 100 | 100 | |

Normal serum and plasma samples were diluted 2-fold prior to testing in the assay.

Dilution Linearity

| Serum | | | EDTA Plasma | | |
|---------------|----|------------------|---------------|--------------------|------------------|
| Fold Dilution | | % Recovery Range | Fold Dilution | Average % Recovery | % Recovery Range |
| 2 | 99 | 97-101 | 2 | 101 | 83-117 |
| 4 | 93 | 88-96 | 4 | 97 | 78-117 |
| 8 | 91 | 85-98 | 8 | 96 | 75-114 |

Normal human serum and EDTA plasma were spiked with Calibrator and tested at different dilutions. Percent recovery at each dilution level was normalized to the neat concentration. Samples may benefit from additional dilution with assay diluent to reduce matrix effects.

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

Spike Recovery

| | Ser | um | EDTA I | Plasma |
|-------------|--------------------|------------------|--------------------|------------------|
| Spike Level | Average % Recovery | % Recovery Range | Average % Recovery | % Recovery Range |
| High | 91 | 73-104 | 91 | 76-133 |
| Mid | 101 | 87-124 | 113 | 71-185 |
| Low | 105 | 92-131 | 101 | 98-103 |

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.

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

Specificity

The GRO- α Antibody Set was tested against all of the analytes in Biomarker Group 1, Metabolic Group 1, and Immuno-Oncology Group 1. Any non-specific binding greater than 2.0% is noted below. The U-PLEX Assay Designer shows compatible assays.

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

Diluent Compatibility

Diluents 57 and 3 are provided when this product is ordered in singleplex and when multiplexed with other Biomarker Group 1 assays. Other diluents may be provided when combined with assays from other U-PLEX Groups. See the appropriate Product Insert for details.

Assay Components

Calibrator: GRO- α is included in Calibrator 10. The GRO- α Calibrator is a full-length recombinant protein expressed in *E. coli*.

Antibodies: The U-PLEX Human GRO- α 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.

