# OPLEX® Mouse TARC

#### www.mesoscale.com®

### Ordering Information

MSD Customer Service Phone: 1-240-314-2795 : 1-301-990-2776 Email: CustomerService@ mesoscale.com

# Scientific Support

Phone: 1-240-314-2798 Email: ScientificSupport@ mesoscale.com

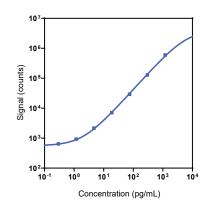
#### **Company Address**

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

.com®	Product Options	Catalog Number	Description
	Multiplex	K15069M, K25069M K152ACM, K252ACM	U-PLEX Biomarker Group 1 (mouse) U-PLEX Metabolic Group 1 (mouse)
<b>on</b> e 795	Singleplex	K152B0K-1/-2/-4	U-PLEX Mouse TARC Assay with SECTOR™ plates
		K152B0K-21/-22/-24	U-PLEX Mouse TARC Assay with QuickPlex <sup>®</sup> plates
		K252B0K-2/-4	U-PLEX Mouse TARC Assay with 384-well plates
ce@	Antibody Set	B22B0-2/-3	U-PLEX Mouse TARC Antibody Set
	Protocol	U-PLEX Product Inserts are available at <u>www.mesoscale.com</u>	

The U-PLEX<sup>®</sup> 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 Mouse TARC 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)	
TARC	0.32	0.31-0.40	

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 2.5X the standard deviations above the background (zero Calibrator).

# Precision

Control	Average Conc. (pg/mL)	Average Intra-run Conc. (%CV)	Inter-run Conc. (%CV)
High	267	4.6	12.8
Mid	78	3.3	12.3
Low	22	3.4	11.3

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.





# Tested Samples

Sample Type	Serum (N=6)	EDTA Plasma (N=6)	
Median (pg/mL)	80	22	
Range (pg/mL)	45-94	19-25	
% Detected	100	100	

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

# **Dilution Linearity**

	Serum		EDTA Plasma		
Fold Dilution	Average % Recovery	% Recovery Range	Fold Dilution	Average % Recovery	% Recovery Range
2	111	103-125	2	139	132-149
4	121	111-131	4	162	150-175
8	116	102-130	8	174	162-187

Normal mouse serum and EDTA plasma were spiked with Calibrator and tested at different dilutions. Undiluted samples were tested 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

# Spike Recovery

	Ser	um	EDTA I	Plasma
Spike Level	Average % Recovery	% Recovery Range	Average % Recovery	% Recovery Range
High	90	86-94	64	60-69
Mid	93	90-99	70	67-74
Low	96	94-101	74	62-83

Normal serum and plasma were spiked with Calibrator at 3 levels. Undiluted samples were tested 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

To assess specificity, the TARC Antibody Set was tested individually against a larger panel of analytes for nonspecific binding (6CKine/Ccl21, BAFF, BCA-1/BLC, CD40, Eotaxin, EPO, GM-CSF, IFN- $\alpha$ , IFN- $\beta$ , IFN- $\gamma$ , IL-1 $\beta$ , IL-2, IL-4, IL-5, IL-6, IL-9, IL-10, IL-12/IL-23p40, IL-12p70, IL-13, IL-15, IL-16, IL-17A/F, IL-17C, IL-17E/IL-25, IL-17F, IL-21, IL-22, IL-23, IL-27p28/IL-30, IL-33, IP-10, KC/GR0, MCP-1, MCP-5/Ccl12, MDC, MIP-1 $\alpha$ , MIP-1 $\beta$ , MIP-2, MIP-3 $\alpha$ , MMP-9 (total), NGAL/LCN2, RANTES, SDF-1 $\alpha$ , TARC, TNF-RI, TNF- $\alpha$ , VEGF-A). 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 41 and Antibody Diluent 45. 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:** TARC is included in Calibrator 17. The mouse TARC Calibrator is a full-length recombinant protein expressed in *E. coli.* **Antibodies:** The U-PLEX Mouse TARC Assay uses a goat polyclonal 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.

MESO SCALE DISCOVERY, Meso Scale Diagnostics, www.mesoscale.com, MSD, MSD (design), QuickPlex, SECTOR, U-PLEX, U-PLEX (design), 96 WELL SMALL-SPOT (design), and Spot the Difference are trademarks and/or service marks of Meso Scale Diagnostics, LLC. ©2016-2019, 2023 Meso Scale Diagnostics, LLC. All rights reserved.

