Magnetic Luminex® Performance Assay
Human TIM-1/KIM-1/HAVCR Kit

Catalog Number: LHK1750
Pack Size: 100 Tests

SPECIFICATIONS AND USE

Recommended Sample Types
- Serum, EDTA plasma, heparin plasma, and urine.

Microparticle Region
- Region-26

Components
- Microparticle Concentrate (Part 894301) is supplied as a 100X concentrated stock (0.075 mL) with preservatives.
- Biotin-Antibody Concentrate (Part 894312) is supplied as a 100X concentrated stock solution (0.075 mL) with preservatives.

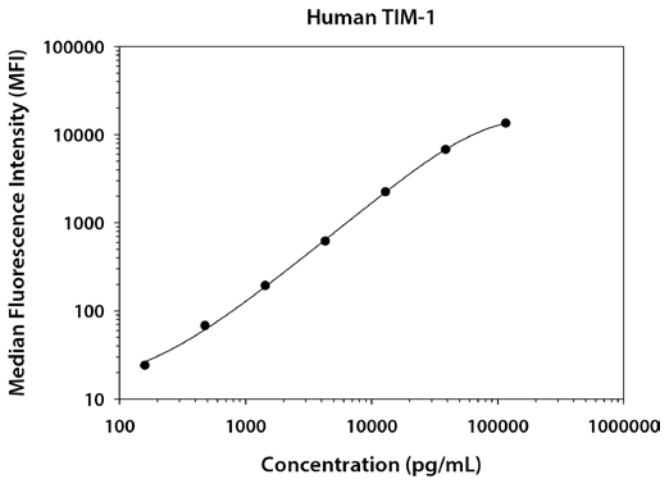
Other Supplies Required
- Magnetic Luminex Performance Assay Human Kidney Biomarker Base Kit (Catalog Number LHK000).

Storage
- Store the unopened kit at 2-8 °C. Do not use past the expiration date on the label.
- **Avoid freezing microparticles.**
- **Protect microparticles from light.**

Instructions for Use
- Refer to the Base Kit insert for the Magnetic Luminex Performance Assay procedure.

TYPICAL DATA

This human TIM-1 standard curve is provided only for demonstration. A standard curve must be generated each time an assay is run, utilizing values from the Standard Value Card included in the Base Kit.



Standard	pg/mL	MFI	Average	Corrected
Blank	0	13 14	14	——
1	116,000	13,491 13,627	13,559	13,546
2	38,667	6787 6855	6821	6808
3	12,889	2226 2298	2262	2249
4	4296	625 639	632	619
5	1432	206 209	208	194
6	477	80 83	82	68
7	159	37 38	38	24

PERFORMANCE CHARACTERISTICS

All data were collected with assays run as a multiplex.

Sensitivity - The Minimum Detectable Dose (MDD) was determined by adding two standard deviations to the mean MFI of twenty zero standard replicates and calculating the corresponding concentration.

Thirty-two assays were evaluated, and the MDD of human TIM-1 ranged from 3.60-16.3 pg/mL. The mean MDD was 7.5 pg/mL.

CORRELATION

This assay has been correlated to the respective Quantikine® ELISA kit with a slope of 0.9-1.1 and an R^2 value greater than 0.9.

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1-800-343-7475

Intra-assay Precision (precision within an assay) - Three samples of known concentration were tested twenty times on one plate to assess precision within an assay.
Inter-assay Precision (precision between assays) - Three samples of known concentration were tested in separate assays to assess precision between assays. Assays were performed by at least three technicians using two lots of components.

	Intra-assay Precision			Inter-assay Precision		
Sample	1	2	3	1	2	3
n	20	20	20	72	70	72
Mean (pg/mL)	785	5010	29,985	767	4863	29,451
Standard Deviation	18.7	50	402	80.9	324	1753
% CV	2.4	1.0	1.3	10.5	6.7	6.0

Linearity - Samples containing and/or spiked with high concentrations of TIM-1 were serially diluted to evaluate assay linearity.

		Serum (n=4)	EDTA plasma (n=4)	Heparin plasma (n=4)	Urine (n=4)
1:2	Average % of Expected	107	108	110	97
	Range (%)	99-119	101-125	106-123	94-99
1:4	Average % of Expected	99	101	100	92
	Range (%)	96-107	97-109	98-105	90-94
1:8	Average % of Expected	102	104	101	100
	Range (%)	99-106	98-113	100-106	97-102

Specificity - This assay recognizes natural and recombinant human TIM-1. The assay was tested for cross-reactivity and interference with the following factors. Less than 0.5% cross-reactivity and interference was observed.

Recombinant human:

ApoA1
ApoA2
ApoB
ApoB100
ApoC1
ApoC2
ApoD
ApoE
ApoH
ApoM
Cathepsin A
Cathepsin B
Cathepsin C
Cathepsin D
Cathepsin E
Cathepsin F
Cathepsin L
Cathepsin O
Cathepsin S
Cathepsin V
Cathepsin Z
CCL2/MCP-1
CCL5/RANTES
Cystatin A
Cystatin B
Cystatin E/M
Cystatin F
Cystatin S
Cystatin SA
Cystatin SN
Clusterin-like 1
COX-2
CRP
CXCL1/GROα
CXCL2/GROβ
CXCL3/GROγ
CXCL5/ENA-78
CXCL6/GCP-2
CXCL7/NAP-2
CXCL8/IL-8
CXCL9/MIG
CXCL11/I-TAC
CXCL12/SDF-1
CXCL13/BLC/BCA-1
Enterokinase
Fetuin B
Fibronectin
HAI-1
HAI-2
HGF R/c-MET
HGF Activator
HPRG
IFN-γ
Lipocalin-1
MMP-3
MMP-7
MMP-9
MSP
Plasminogen
Serpin A1
TIM-3
TIM-4
TFF-1
TFF-2
Thrombin

Recombinant mouse:

Clusterin
Cystatin C
CXCL10/IP-10/CRG-2
HGF
Lipocalin-2/NGAL
Osteopontin (OPN)
TIM-1/KIM-1/HAVCR

Recombinant rat:

Clusterin
Fetuin A
TIM-1/KIM-1/HAVCR

Other recombinants:

bovine Osteopontin

Natural human proteins:

α1-Acid Glycoprotein
Kininogen

Recombinant human multiplex partners:

Clusterin
Cystatin C
Lipocalin-2/NGAL
Osteopontin (OPN)
CXCL10/IP-10
HGF
Fetuin A
RBP4
TFF3

TECHNICAL HINTS

- Protect the microparticles and streptavidin-PE from light at all times.
- Refer to the Base Kit Standard Value Card for reconstitution volume and values of the reconstituted standard.
- Diluted microparticles cannot be stored. Make a fresh dilution of microparticles each time the assay is run.
- The use of a magnetic device made to accommodate a microplate is necessary for washing.
- Discrepancies may exist in values obtained for the same analyte utilizing different technologies.

Luminex Performance Assays afford the user the benefit of multianalyte analysis of biomarkers in a complex sample. A single, multipurpose diluent is used to optimize recovery, linearity, and reproducibility. Such a multipurpose diluent may not optimize any single analyte to the same degree that a unique diluent selected for analysis of that analyte can optimize conditions. Therefore, some performance characteristics may be more variable than those for assays designed specifically for single analyte analysis.

**This product is covered by one or more of the following US Patents 7,300,652; 7,041,290; 6,664,385 and other US and foreign patents pending or issued.*