



# Human Macrophage scavenger receptor types I and II(MSR1) ELISA kit

<b>Product Code</b>	CSB-EL015050HU
<b>Abbreviation</b>	MSR1
<b>Protein Biological Process 1</b>	Immunity
<b>Target Name</b>	macrophage scavenger receptor 1
<b>Uniprot No.</b>	P21757
<b>Alias</b>	CD204, SCARA1, SR-A, phSR1, phSR2, OTTHUMP00000120049 macrophage acetylated LDL receptor I and II macrophage scavenger receptor type III scavenger receptor class A, member 1
<b>Product Type</b>	ELISA Kit
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Protein Biological Process 3</b>	Endocytosis
<b>Sample Types</b>	serum, plasma, tissue homogenates
<b>Detection Range</b>	78 pg/mL-5000 pg/mL
<b>Sensitivity</b>	19.5 pg/mL
<b>Assay Time</b>	1-5h
<b>Sample Volume</b>	50-100ul
<b>Detection Wavelength</b>	450 nm
<b>Lead Time</b>	3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.
<b>Research Area</b>	Cardiovascular
<b>Gene Names</b>	MSR1
<b>Tag Info</b>	quantitative
<b>Protein Description</b>	Sandwich
<b>Description</b>	This Human MSR1 ELISA Kit was designed for the quantitative measurement of Human MSR1 protein in serum, plasma, tissue homogenates. It is a Sandwich ELISA kit, its detection range is 78 pg/mL-5000 pg/mL and the sensitivity is 19.5 pg/mL.
<b>Target Details</b>	This gene encodes the class A macrophage scavenger receptors, which include three different types (1, 2, 3) generated by alternative splicing of this gene. These receptors or isoforms are macrophage-specific trimeric integral



membrane glycoproteins and have been implicated in many macrophage-associated physiological and pathological processes including atherosclerosis, Alzheimer's disease, and host defense. The isoforms type 1 and type 2 are functional receptors and are able to mediate the endocytosis of modified low density lipoproteins (LDLs). The isoform type 3 does not internalize modified LDL (acetyl-LDL) despite having the domain shown to mediate this function in the types 1 and 2 isoforms. It has an altered intracellular processing and is trapped within the endoplasmic reticulum, making it unable to perform endocytosis. The isoform type 3 can inhibit the function of isoforms type 1 and type 2 when co-expressed, indicating a dominant negative effect and suggesting a mechanism for regulation of scavenger receptor activity in macrophages.

#### Product Precision

Intra-assay Precision (Precision within an assay): CV%<8%

Three samples of known concentration were tested twenty times on one plate to assess.

Inter-assay Precision (Precision between assays): CV%<10%

Three samples of known concentration were tested in twenty assays to assess.

#### Linearity

To assess the linearity of the assay, samples were spiked with high concentrations of human MSR1 in various matrices and diluted with the Sample Diluent to produce samples with values within the dynamic range of the assay.

	Sample	Serum(n=4)
1:1	Average %	91
	Range %	86-95
1:2	Average %	92
	Range %	87-96
1:4	Average %	88
	Range %	82-94
1:8	Average %	87
	Range %	82-92

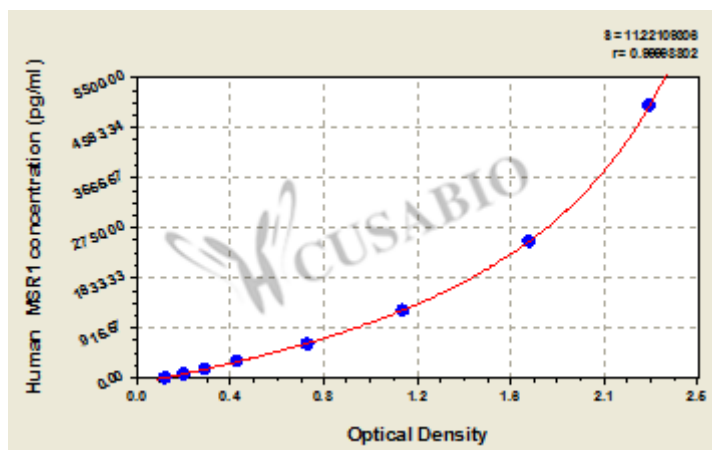
#### Recovery

The recovery of human MSR1 spiked to levels throughout the range of the assay in various matrices was evaluated. Samples were diluted prior to assay as directed in the Sample Preparation section.

Sample Type	Average % Recovery	Range
Serum (n=5)	99	95-104
EDTA plasma (n=4)	86	82-92

#### Typical

These standard curves are provided for demonstration only. A standard curve should be generated for each set of samples assayed.



pg/ml	OD1	OD2	Average	Corrected
5000	2.342	2.164	2.253	2.119
2500	1.676	1.772	1.724	1.590
1250	1.194	1.153	1.174	1.040
625	0.764	0.751	0.758	0.624
312	0.452	0.449	0.451	0.317
156	0.313	0.301	0.307	0.173
78	0.222	0.214	0.218	0.084
0	0.134	0.133	0.134	

## Msds

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