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MSR1 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant MSR1.
Catalog # AT2919a

Product Information

Application	WB, E
Primary Accession	P21757
Other Accession	NM_138715
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG3 Kappa
Clone Names	2G8
Calculated MW	49762

Additional Information

Gene ID	4481
Other Names	Macrophage scavenger receptor types I and II, Macrophage acetylated LDL receptor I and II, Scavenger receptor class A member 1, CD204, MSR1, SCARA1
Target/Specificity	MSR1 (NP_619729, 121 a.a. ~ 220 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	MSR1 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

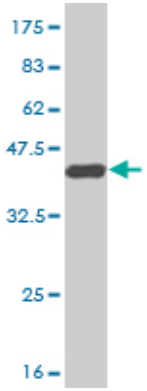
This gene encodes the class A macrophage scavenger receptors, which include three different types (1, 2, 3) generated by alternative splicing of this gene. These receptors or isoforms are macrophage-specific trimeric integral membrane glycoproteins and have been implicated in many macrophage-associated 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.

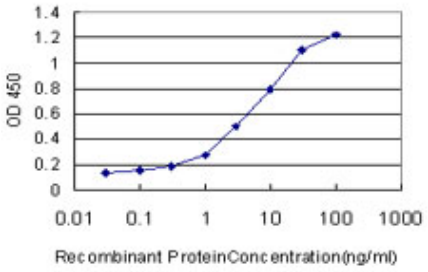
References

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.Common polymorphisms in ITGA2, PON1 and THBS2 are associated with coronary atherosclerosis in a candidate gene association study of the Chinese Han population. Wang Y, et al. J Hum Genet, 2010 Aug. PMID 20485444.CD36 and macrophage scavenger receptor a modulate foam cell formation via inhibition of lipid-laden platelet phagocytosis. Seizer P, et al. Semin Thromb Hemost, 2010 Mar. PMID 20414830.Genetic variation in APOJ, LPL, and TNFRSF10B affects plasma fatty acid distribution in Alaskan Eskimos. Voruganti VS, et al. Am J Clin Nutr, 2010 Jun. PMID 20410100.Decreased infiltration of macrophage scavenger receptor-positive cells in initial negative biopsy specimens is correlated with positive repeat biopsies of the prostate. Nonomura N, et al. Cancer Sci, 2010 Jun. PMID 20384632.

Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.74 KDa) .



Detection limit for recombinant GST tagged MSR1 is approximately 0.3ng/ml as a capture antibody.