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SOD3 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant SOD3.
Catalog # AT3992a

Product Information

Application	WB, E
Primary Accession	P08294
Other Accession	BC014418
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	5C3
Calculated MW	25851

Additional Information

Gene ID	6649
Other Names	Extracellular superoxide dismutase [Cu-Zn], EC-SOD, SOD3
Target/Specificity	SOD3 (AAH14418, 26 a.a. ~ 125 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	SOD3 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

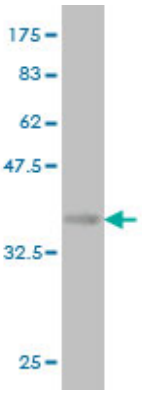
Background

This gene encodes a member of the superoxide dismutase (SOD) protein family. SODs are antioxidant enzymes that catalyze the dismutation of two superoxide radicals into hydrogen peroxide and oxygen. The product of this gene is thought to protect the brain, lungs, and other tissues from oxidative stress. The protein is secreted into the extracellular space and forms a glycosylated homotetramer that is anchored to the extracellular matrix (ECM) and cell surfaces through an interaction with heparan sulfate proteoglycan and collagen. A fraction of the protein is cleaved near the C-terminus before secretion to generate circulating tetramers that do not interact with the ECM.

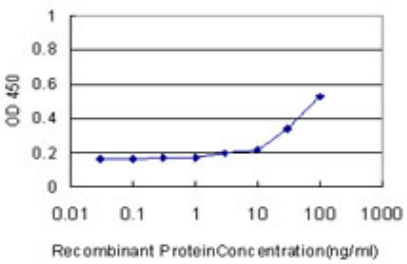
References

A genetic association study of maternal and fetal candidate genes that predispose to preterm prelabor rupture of membranes (PROM). Romero R, et al. Am J Obstet Gynecol, 2010 Jul 29. PMID 20673868.Polymorphisms in the superoxide dismutase-3 gene are associated with emphysema in COPD. S?rheim IC, et al. COPD, 2010 Aug. PMID 20673035.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.Single-nucleotide polymorphisms within the antioxidant defence system and associations with aggressive prostate cancer. Abe M, et al. BJU Int, 2010 May 5. PMID 20477822.

Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.41 KDa) .



Detection limit for recombinant GST tagged SOD3 is approximately 10ng/ml as a capture antibody.