



SODE mouse mAb

Catalog No	YP-mAb-11494
Isotype	IgG
Reactivity	Human; Mouse; Rat
Applications	WB
Gene Name	SOD3
Protein Name	SODE
Immunogen	Synthesized peptide derived from human SODE AA range: 67-117
Specificity	This antibody detects endogenous levels of SODE at Human/Mouse/Rat
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, mouse, IgG
Purification	The antibody was affinity-purified from mouse serum by affinity-chromatography using specific immunogen.
Dilution	WB 1:500-2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Observed Band	
Calculated Molecular Weight	26kD
Cell Pathway	Secreted, extracellular space. Golgi apparatus, trans-Golgi network . 99% of EC-SOD is anchored to heparan sulfate proteoglycans in the tissue interstitium, and 1% is located in the vasculature in equilibrium between the plasma and the endothelium.
Tissue Specificity	Expressed in blood vessels, heart, lung, kidney and placenta. Major SOD isoenzyme in extracellular fluids such as plasma, lymph and synovial fluid.
Function	catalytic activity: $2 \text{ superoxide} + 2 \text{ H}^{+} = \text{O}_2 + \text{H}_2\text{O}_2$., cofactor: Binds 1 copper ion per subunit., cofactor: Binds 1 zinc ion per subunit., function: Destroys radicals which are normally produced within the cells and which are toxic to biological systems., function: Protect the extracellular space from toxic effect of reactive oxygen intermediates by converting superoxide radicals into hydrogen peroxide and oxygen., online information: Superoxide dismutase entry, polymorphism: The variant Gly-231 which is found in about 2.2% of individual displays a 10-fold increased plasma EC-SOD content due to reduced heparin-binding affinity and thus the impairment of its binding ability to endothelial cell surface., similarity: Belongs to the Cu-Zn superoxide dismutase family., subcellular location: 99% of EC-SOD is anchored to heparan sulfate proteoglycans in the tissue interstitium, and 1% is located in the v



Background

This gene encodes a member of the superoxide dismutase (SOD) protein family. SODs are antioxidant enzymes that catalyze the conversion of superoxide radicals into hydrogen peroxide and oxygen, which may protect the brain, lungs, and other tissues from oxidative stress. Proteolytic processing of the encoded protein results in the formation of two distinct homotetramers that differ in their ability to interact with the extracellular matrix (ECM). Homotetramers consisting of the intact protein, or type C subunit, exhibit high affinity for heparin and are anchored to the ECM. Homotetramers consisting of a proteolytically cleaved form of the protein, or type A subunit, exhibit low affinity for heparin and do not interact with the ECM. A mutation in this gene may be associated with increased heart disease risk. [provided by RefSeq, Oct 2015],

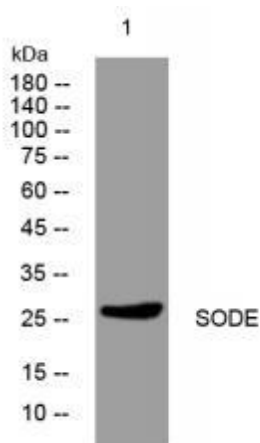
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using SODE mouse mAb