10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

SOD3 Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP6871a

Specification

SOD3 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession P08294

SOD3 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 6649

Other Names
Extracellular superoxide dismutase [Cu-Zn], EC-SOD, SOD3

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP6871a was selected from the N-term region of human SOD3. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

SOD3 Antibody (N-term) Blocking Peptide - Protein Information

Name SOD3

Function
Protect the extracellular space from toxic effect of reactive oxygen intermediates by converting superoxide radicals into hydrogen peroxide and oxygen.

Cellular Location
Secreted, extracellular space. Golgi apparatus, trans-Golgi network {ECO:0000250|UniProtKB:O09164}. Note=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 Location
Expressed in blood vessels, heart, lung, kidney and placenta. Major SOD isoenzyme in extracellular fluids such as plasma, lymph and synovial fluid

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

SOD3 Antibody (N-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

SOD3 Antibody (N-term) Blocking Peptide - Images

SOD3 Antibody (N-term) Blocking Peptide - Background

SOD3 is 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. This protein 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.

SOD3 Antibody (N-term) Blocking Peptide - References

Stern,L.F., et.al., Cytogenet. Genome Res. 101 (2), 178 (2003)