

**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](/products/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

### **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)