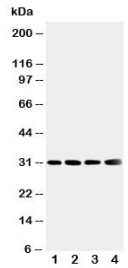
# SOD3 Antibody Superoxide Dismutase 3 (R30999)

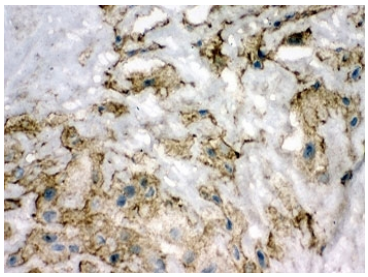
| Catalog No. | Formulation | Size |
|---|---|---|
| R30999 | 0.5mg/ml if reconstituted with 0.2ml sterile DI water | 100 ug |

**Bulk quote request**

| | |
|---|---|
| **Availability** | 1-3 business days |
| **Species Reactivity** | Human |
| **Format** | Antigen affinity purified |
| **Host** | Rabbit |
| **Clonality** | Polyclonal (rabbit origin) |
| **Isotype** | Rabbit IgG |
| **Purity** | Antigen affinity |
| **Buffer** | Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide/thimerosal |
| **UniProt** | P08294 |
| **Localization** | Cytoplasm, extracellular matrix |
| **Applications** | Western blot: 0.5-1ug/ml<br>IHC (FFPE): 0.5-1ug/ml<br>IHC (Frozen): 0.5-1ug/ml<br>Immunocytochemistry: 0.5-1ug/ml |
| **Limitations** | This SOD3 antibody is available for research use only. |




Western blot testing of SOD3 antibody and Lane 1: human placenta; 2: A549; 3: MM231; 4: MCF-7 cell lysate. Predicted molecular weight: 26~32 kDa.



IHC-F testing of SOD3 antibody and human placenta tissue

## Description

Superoxide Dismutase 3 is an enzyme that in humans is encoded by the SOD3 gene. 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. Hendrickson et al.(1990) mapped the SOD3 gene to 4pter-q21 by a study of somatic cell hybrids. Stern et al.(2003) narrowed the assignment to 4p15.3-p15.1 by somatic cell and radiation hybrid analysis, linkage mapping, and FISH. The product of this gene is though 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.

## Application Notes

The stated application concentrations are suggested starting amounts. Titration of the SOD3 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

## Immunogen

An amino acid sequence from the N-terminus of human Superoxide Dismutase 3 (KVTEIWQEVMQRRDDD) was used as the immunogen for this SOD3 antibody.

## Storage

After reconstitution, the SOD3 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.


Copyright © NSJ Bioreagents. All rights reserved.