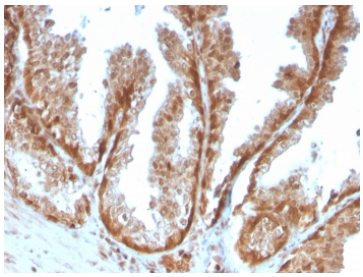
# SOD1 Antibody / Superoxide Dismutase 1 [clone SOD1/4593] (V4835)

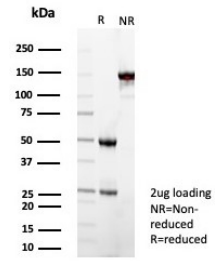
| Catalog No. | Formulation | Size |
|---|---|---|
| V4835-100UG | 0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide | 100 ug |
| V4835-20UG | 0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide | 20 ug |
| V4835SAF-100UG | 1 mg/ml in 1X PBS; BSA free, sodium azide free | 100 ug |

**Bulk quote request**

| | |
|---|---|
| **Availability** | 1-3 business days |
| **Species Reactivity** | Human |
| **Format** | Purified |
| **Host** | Mouse |
| **Clonality** | Monoclonal (mouse origin) |
| **Isotype** | Mouse IgG1, kappa |
| **Clone Name** | SOD1/4593 |
| **Purity** | Protein A/G affinity |
| **UniProt** | P00441 |
| **Localization** | Cytoplasm |
| **Applications** | Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT |
| **Limitations** | This SOD1 antibody is available for research use only. |



IHC staining of FFPE human prostate tissue with SOD1 antibody (clone SOD1/4593). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.




SDS-PAGE analysis of purified, BSA-free SOD1 antibody (clone SOD1/4593) as confirmation of integrity and purity.

## Description

Cu-Zn superoxide dismutase-1 (SOD-1) is a well-characterized cytosolic scavenger of oxygen free radicals that requires copper and zinc binding to potentiate its enzymatic activity. Enzymatically, SOD-1 facilitates the dismutation of oxygen radicals to hydrogen peroxide and also catalyzes pro-oxidant reactions, which include the peroxidase activity and hydroxyl radical generating activity. SOD-1 is ubiquitously expressed in somatic cells and functions as a homodimer. Defects in the gene encoding SOD-1 have been implicated in the progression of neurological diseases, including amyotrophic lateral sclerosis (ALS), a neurodegenerative disease characterized by the loss of spinal motor neurons, Down syndrome and Alzheimer s disease. In familial ALS, several mutations in SOD-1 predominate, resulting in the loss of zinc binding, the loss of scavenging activity of SOD-1, and correlate with an increase in neurotoxicity and motor neuron death.

## Application Notes

Optimal dilution of the SOD1 antibody should be determined by the researcher.

## Immunogen

Recombinant full-length human protein was used as the immunogen for the SOD1 antibody.

## Storage

Aliquot the SOD1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Ordering: Phone: 858.663.9055 | Fax: 1.267.821.0800 | Email: info@nsjbio.com
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