

**SOD2 Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP7579a****Specification**

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**SOD2 Antibody - Product Information**

Application	<b>WB, FC,E</b>
Primary Accession	<a href="#">P04179</a>
Reactivity	<b>Human</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Isotype	<b>Rabbit IgG</b>

**SOD2 Antibody - Additional Information****Gene ID** 6648**Other Names**

Superoxide dismutase [Mn], mitochondrial, SOD2

**Target/Specificity**

This SOD2 antibody is generated from rabbits immunized with human recombinant SD protein.

**Dilution**

WB~~1:1000

FC~~1:10~50

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

SOD2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**SOD2 Antibody - Protein Information****Name** SOD2**Function** Destroys superoxide anion radicals which are normally produced within the cells and which are toxic to biological systems.**Cellular Location**

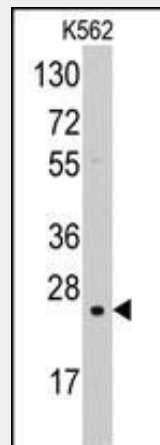
Mitochondrion matrix.

## SOD2 Antibody - Protocols

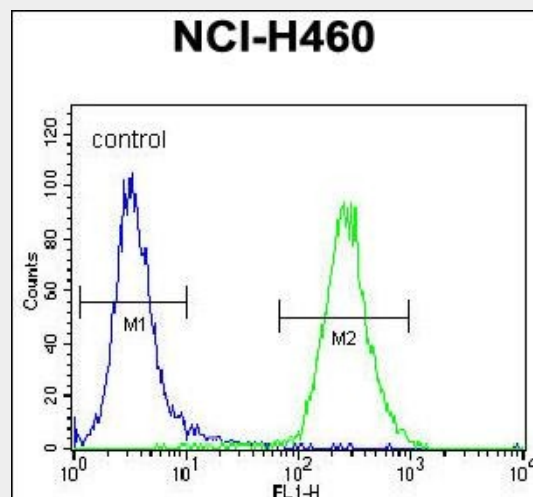
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## SOD2 Antibody - Images



Western blot analysis of anti-SOD2 Pab (Cat.#AP7979a) in K562 cell line lysates (35ug/lane). SOD2(arrow) was detected using the purified Pab.



SOD2 Antibody (Cat. #AP7579a) flow cytometric analysis of NCI-H460 cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

## SOD2 Antibody - Background

SOD2 is a member of the iron/manganese superoxide dismutase family. It is a mitochondrial protein that forms a homotetramer and binds one manganese ion per subunit. This protein binds to the superoxide byproducts of oxidative phosphorylation and converts them to hydrogen peroxide and diatomic oxygen. Mutations in this gene have been associated with idiopathic cardiomyopathy (IDC), premature aging, sporadic motor neuron disease, and cancer.

### **SOD2 Antibody - References**

Fabre,E.E., Am. J. Clin. Nutr. 87 (5), 1504-1512 (2008) Kaewpila,S., Cancer Res. 68 (8), 2781-2788 (2008) Flekac,M., (er) BMC Med. Genet. 9, 30 (2008)

### **SOD2 Antibody - Citations**

- [IL-1 induces p62/SQSTM1 and autophagy in ER \$\alpha\$  BCa-like phenotype.](#)
- [Glutathione-dependent and -independent oxidative stress-control mechanisms distinguish normal human mammary epithelial cell subsets.](#)