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

SOD2 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7579a

Product Information

Application	WB, FC, E
Primary Accession	P04179
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB14756
Calculated MW	24750

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 E~~Use at an assay dependent concentration.
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.

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.

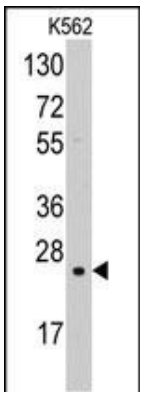
Background

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.

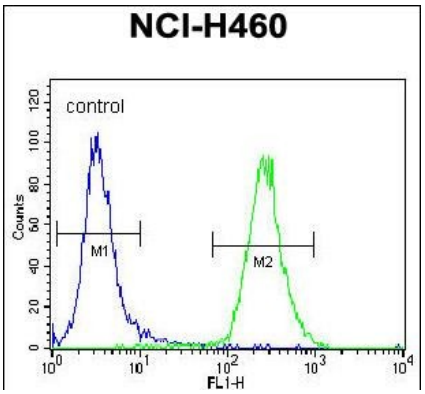
References

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)

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.

Citations

- Glutathione-dependent and -independent oxidative stress-control mechanisms distinguish normal human mammary epithelial cell subsets.
- IL-1 induces p62/SQSTM1 and autophagy in ERα BCa-like phenotype.