

BP825**Polyclonal Antibody to Superoxide Dismutase 1 / SOD1 - Purified**

Alternate names:	ALS1, CuZn-SOD, CuZnSOD, IPOA, SOD-1, Superoxide dismutase [Cu-Zn]
Quantity:	1 ml
Concentration:	5.0 mg/ml
Background:	Superoxide dismutases (SOD) are a class of enzymes that catalyze the dismutation of superoxide into oxygen and hydrogen peroxide. As such, they are an important antioxidant defense in nearly all cells exposed to oxygen. There are three major families of superoxide dismutase, depending on the metal cofactor: Cu-Zn (which binds both copper and zinc), Fe and Mn types (which bind either iron or manganese), and finally the Ni type, which binds nickel.
Uniprot ID:	P00441
NCBI:	NP_000445.1
GeneID:	6647
Host / Isotype:	Sheep / IgG
Immunogen:	Native Superoxide Dismutase from Bovine erythrocytes
Format:	State: Liquid purified Ig fraction Purification: Protein G Chromatography Buffer System: PBS, pH 7.2 Preservatives: 0.09% Sodium Azide
Applications:	ELISA (1/500-1/4000). Immunohistochemistry on Frozen Sections (has been used in ICC against human conjunctival tissue at a dilution of 1/150, See Reference 1). Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody recognizes Superoxide Dismutase (Cu-Zn) and has the following specificities as determined by ELISA at 50% maximal binding: SOD, Bovine RBCs (Cu/Zn): 100%. SOD, Human RBCs (Cu/Zn): 30%. SOD, Bovine liver (Mn): 14%. SOD, E. coli (Fe): 14%. SOD, E. coli (Mn): 14%. Species: Human, Bovine. Other species not tested.
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
General Readings:	1. Laszlo Modis jr et al., Hungarian Eotvos Scholarship Board (59.176/1996). 2. Yang LY, Chen WL, Lin JW, Lee SF, Lee CC, Hung TI, et al. Differential expression of antioxidant enzymes in various hepatocellular carcinoma cell lines. J Cell Biochem. 2005 Oct 15;96(3):622-31. PubMed PMID: 16052474.

3. Nowicki M, Wojtkiewicz J, Lewczuk B, Kosacka J, Majewski M, Przybylska-Gornowicz B. Peptidergic and nitregeric innervation of the pineal gland in the domestic pig: an immunohistochemical study. *Anat Histol Embryol.* 2007 Aug;36(4):311-20. PubMed PMID: 17617110.
4. Kankofer, M. et al. (2013) The Presence of SOD 1 and GSH-Px in Bovine Retained and Properly Released Foetal Membranes. *Reprod Domest Anim.* Feb 11. [Epub ahead of print]