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Anti-Superoxide Dismutase 3 Rabbit Monoclonal Antibody

Catalog # ABO15205

Product Information

Application	WB, IHC
Primary Accession	P08294
Host	Rabbit
Isotype	IgG
Reactivity	Human
Clonality	Monoclonal
Format	Liquid
Description	Anti-Superoxide Dismutase 3 Rabbit Monoclonal Antibody . Tested in WB, IHC applications. This antibody reacts with Human.

Additional Information

Gene ID	6649
Other Names	Extracellular superoxide dismutase [Cu-Zn], EC-SOD, 1.15.1.1, SOD3
Calculated MW	25851
Application Details	WB 1:500-1:2000 IHC 1:50-1:200
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: 17S81
Immunogen	A synthesized peptide derived from human Superoxide Dismutase 3
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Protein Information

Name	SOD3 (HGNC:11181)
Function	Secreted antioxidant enzyme that acts as the primary scavenger of superoxide radicals in the extracellular space, converting them to hydrogen peroxide and thereby protecting tissues from oxidative damage

(PubMed:12933702, PubMed:15761197). Also preserves nitric oxide bioavailability by preventing the formation of harmful peroxynitrite (PubMed:12933702). Stored in intracellular pre-formed vesicles of macrophages and neutrophils and released upon stimulation by inflammatory mediators (PubMed:31326693).

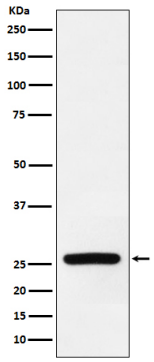
Cellular Location

Secreted, extracellular space. Golgi apparatus, trans-Golgi network {ECO:0000250|UniProtKB:O09164}. Vesicle Note=99% of SOD3/EC-SOD is anchored to heparan sulfate proteoglycans in the tissue interstitium, and 1% is located in the vasculature in equilibrium between the plasma and the endothelium (PubMed:8546689). In macrophages and neutrophiles, extracellular SOD2 in endocytosed and stored in intracellular vesicles (PubMed:31326693)

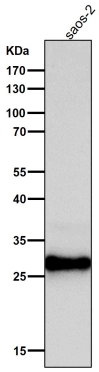
Tissue Location

Expressed in blood vessels, heart, lung, kidney and placenta. Major SOD isoenzyme in extracellular fluids such as plasma, lymph and synovial fluid (PubMed:7959763). Stored in macrophages intracellular compartments (PubMed:31326693)

Images



Western blot analysis of Superoxide Dismutase 3 expression in human fetal heart lysate.



All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.