

Superoxide Dismutase 1 Rabbit mAb

Catalog No: #49350

Package Size: #49350-1 50ul #49350-2 100ul

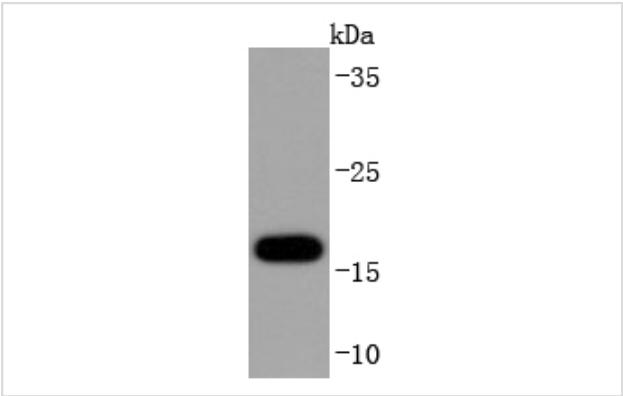
Description

Product Name	Superoxide Dismutase 1 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal
Clone No.	JF1005
Purification	ProA affinity purified
Applications	WB, ICC/IF, IHC, FC
Species Reactivity	Hu, Rt
Immunogen Description	recombinant protein
Conjugates	Unconjugated
Other Names	ALS antibody ALS1 antibody Amyotrophic lateral sclerosis 1 adult antibody Cu/Zn SOD antibody Cu/Zn superoxide dismutase antibody Epididymis secretory protein Li 44 antibody HEL S 44 antibody Homodimer antibody hSod1 antibody Indophenoloxidase A antibody IPOA antibody Mn superoxide dismutase antibody SOD antibody SOD soluble antibody SOD1 antibody SOD2 antibody SODC antibody SODC_HUMAN antibody Superoxide dismutase [Cu-Zn] antibody Superoxide dismutase 1 antibody Superoxide dismutase 1 soluble antibody Superoxide dismutase Cu Zn antibody Superoxide dismutase cystolic antibody
Accession No.	Swiss-Prot#:P00441
Calculated MW	16 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

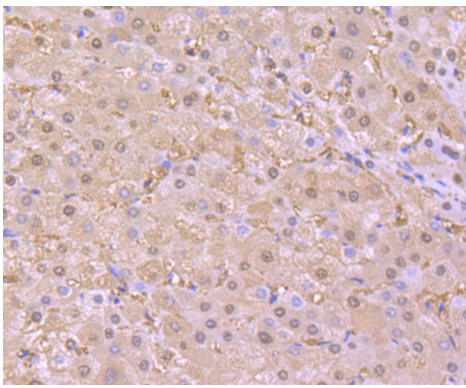
Application Details

WB: 1:1,000-1:2,000 IHC: 1:50-1:200 ICC: 1:50-1:200FC: 1:50-1:100

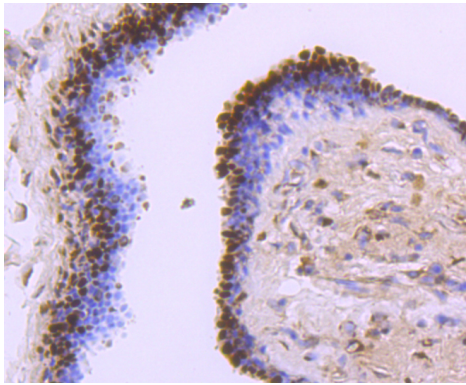
Images



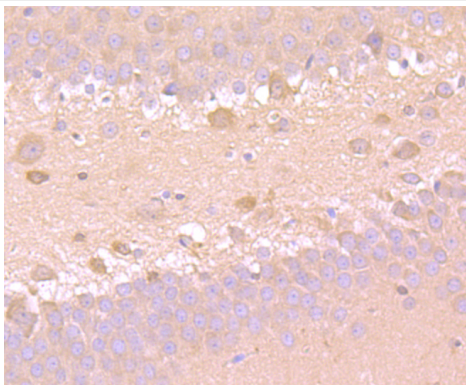
Western blot analysis of SOD1 on MCF-7 cells lysates using anti-SOD1 antibody at 1/1,000 dilution.



Immunohistochemical analysis of paraffin-embedded human liver tissue using anti-SOD1 antibody. Counter stained with hematoxylin.



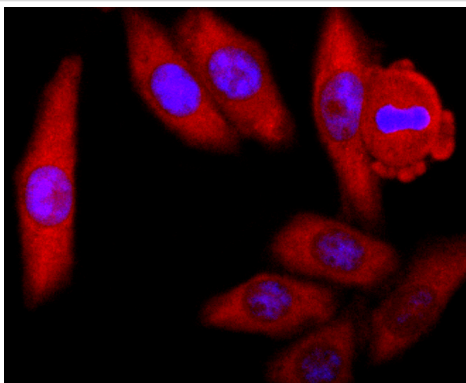
Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using anti-SOD1 antibody. Counter stained with hematoxylin.



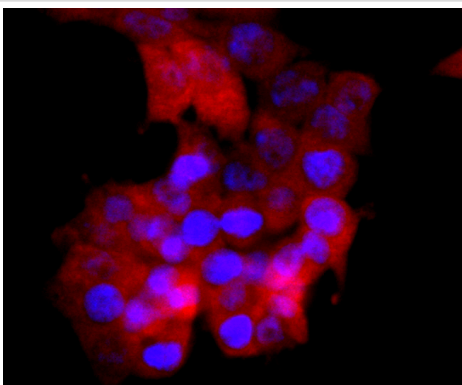
Immunohistochemical analysis of paraffin-embedded rat brain tissue using anti-SOD1 antibody. Counter stained with hematoxylin.



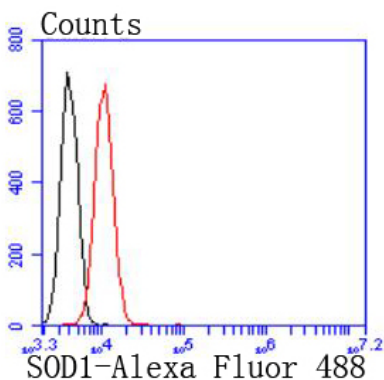
ICC staining SOD1 in HeLa cells (red). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining SOD1 in HepG2 cells (red). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining SOD1 in 293T cells (red). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



Flow cytometric analysis of Jurkat cells with SOD1 antibody at 1/50 dilution (red) compared with an unlabelled control (cells without incubation with primary antibody; black). Alexa Fluor 488-conjugated goat anti rabbit IgG was used as the secondary antibody.

Background

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.

References

Note: This product is for in vitro research use only and is not intended for use in humans or animals.