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SOD1 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8733c

Specification

SOD1 Antibody (Center) - Product Information

Application	**IF, FC, IHC-P, WB,E**
Primary Accession	P00441
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**55-84**

SOD1 Antibody (Center) - Additional Information

Gene ID 6647

Other Names
Superoxide dismutase [Cu-Zn], Superoxide dismutase 1, hSod1, SOD1

Target/Specificity
This SOD1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 55-84 amino acids from the Central region of human SOD1.

Dilution
IF~~1:10~50
FC~~1:10~50
IHC-P~~1:50~100
WB~~1:1000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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
SOD1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

SOD1 Antibody (Center) - Protein Information

Name SOD1 (HGNC:11179)

Function Destroys radicals which are normally produced within the cells and which are toxic to biological systems.

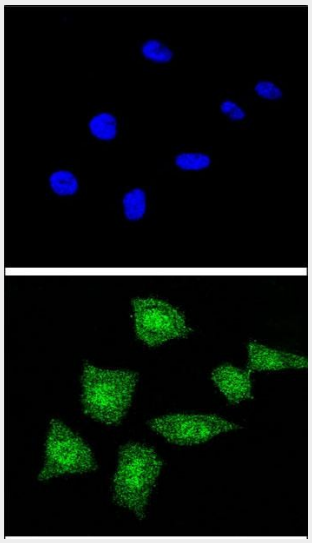
Cellular Location
Cytoplasm. Nucleus. Note=Predominantly cytoplasmic; the pathogenic variants ALS1 Arg-86 and Ala-94 gradually aggregates and accumulates in mitochondria.

SOD1 Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SOD1 Antibody (Center) - Images



Confocal immunofluorescent analysis of SOD1 Antibody (Center) (Cat. #AP8733c) with 293 cell followed by Alexa Fluor® 488-conjugated goat anti-rabbit IgG (green).DAPI was used to stain the cell nuclear (blue).

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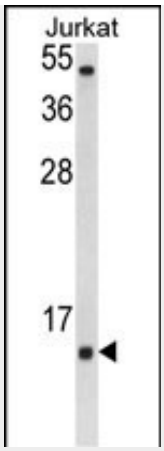
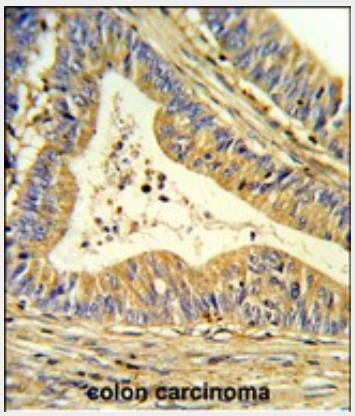
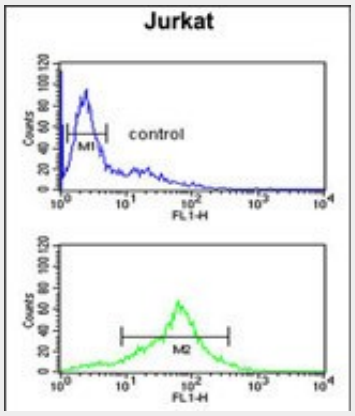


Western blot analysis of SOD1 Antibody (Center) (Cat. #AP8733c) in Jurkat cell line lysates (35ug/lane). SOD1 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human colon carcinoma reacted with SOD1 Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



SOD1 Antibody (Center) (Cat. #AP8733c) flow cytometric analysis of Jurkat cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

SOD1 Antibody (Center) - Background

SOD1 binds copper and zinc ions and is one of two isozymes responsible for destroying free superoxide radicals in the body. This isozyme is a soluble cytoplasmic protein, acting as a

homodimer to convert naturally-occuring but harmful superoxide radicals to molecular oxygen and hydrogen peroxide. The other isozyme is a mitochondrial protein.

SOD1 Antibody (Center) - References

Crapo,J.D., et.al., Proc. Natl. Acad. Sci. U.S.A. 89 (21), 10405-10409 (1992)

SOD1 Antibody (Center) - Citations

- Effects of MUL1 and PARKIN on the circadian clock, brain and behaviour in Drosophila Parkinson's disease models.
- Glutathione-dependent and -independent oxidative stress-control mechanisms distinguish normal human mammary epithelial cell subsets.