Mouse anti-Human Superoxide Dismutase 1 (SOD1) Monoclonal Antibody | anti-SOD1 antibody

Superoxide Dismutase 1 (SOD1) (Antioxidant Enzyme) Mouse Monoclonal Antibody [Clone SOD1/4330]

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA215925	**Mouse**	**Human**	**Immunohistochemistry, Western Blot**

PRODUCT SYNONYMS

Superoxide Dismutase 1 (SOD1); Monoclonal Antibody; Superoxide Dismutase 1 (SOD1) (Antioxidant Enzyme) Mouse Monoclonal Antibody [Clone SOD1/4330]; Superoxide Dismutase 1 (SOD1) (Antioxidant Enzyme); Amyotrophic lateral sclerosis 1 (ALS1); Cu/Zn SOD; Cu/Zn Superoxide Dismutase; Epididymis Secretory Protein Li 44; Indophenoloxidase A (IPOA); Superoxide Dismutase [Cu-Zn]; anti-SOD1 antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG1, kappa
Clone Number	SOD1/4330
Form/Format	200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0. 05% BSA & 0. 05% azide.
Applicable Applications for anti-SOD1 antibody	IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	Recombinant fragment (around aa14-148) of human SOD1 (exact sequence is proprietary)
Cellular Localization	Cytoplasm
Positive Control	LNCaP, JEG-3 or Jurkat cells. Human breast or ovarian carcinoma.
Hu-chromosome Location	21q22.11
Unigene	443914
Preparation and Storage	Antibody with azide: store at 2 to 8 degree C Non-hazardous. No MSDS required.

IMAGES



Application Data
Analysis of Protein Array containing more than 19,000 full-length human proteins using Superoxide Dismutase 1 Mouse Monoclonal Antibody (SOD1/4330).Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProtTM array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProtTM are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.



IHC (Immunohistochemisry)
Formalin-fixed, paraffin-embedded human prostate stained with Superoxide Dismutase 1 Mouse Monoclonal Antibody (SOD1/4330).



SDS-PAGE
SDS-PAGE Analysis Purified Superoxide Dismutase 1 Mouse Monoclonal Antibody (SOD1/4330). Confirmation of Integrity and Purity of Antibody.



WB (Western Blot)
Western Blot Analysis of JEG-3 and LNCaP cell lysates using Superoxide Dismutase 1 Mouse Monoclonal Antibody (SOD1/4330).

ADDITIONAL INFORMATION

Related Product Information for anti-SOD1 antibody	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.

NCBI AND UNIPROT INFORMATION

NCBI GI #	134611
NCBI GeneID	6647
UniProt Accession #	P00441; Q16669; Q16711; Q16838; Q16839; Q16840; Q6NR85; A6NHJ0; D3DSE4
Molecular Weight	154
NCBI Official Full Name	Superoxide dismutase
NCBI Official Synonym Full Names	superoxide dismutase 1, soluble
NCBI Official Symbol	SOD1
NCBI Official Synonym Symbols	ALS; SOD; ALS1; IPOA; hSod1; HEL-S-44; homodimer
NCBI Protein Information	superoxide dismutase [Cu-Zn]; superoxide dismutase [Cu-Zn]; SOD, soluble; indophenoloxidase A; Cu/Zn superoxide dismutase; superoxide dismutase, cystolic; epididymis secretory protein Li 44
UniProt Protein Name	Superoxide dismutase [Cu-Zn]
UniProt Gene Name	**SOD1**
UniProt Synonym Gene Names	hSod1

UniProt Entry Name	SODC_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: https://stage.aaabiotech.com/monoclonal/superoxide-dismutase-1-sod1-antibody-clone-sod1-4330-immunohistochemistry-western-blot-elisa/215925