

Anti-Superoxide Dismutase 1 Antibody [SOD1/3923] (A277795)

Specifications:

Name:	Anti-Superoxide Dismutase 1 Antibody [SOD1/3923]
Description:	Mouse monoclonal [SOD1/3923] antibody to Superoxide Dismutase 1.
Specificity:	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.
Applications:	Flow Cytometry, IF, IHC-P
Recommended Dilutions:	Flow Cytometry: 1-2 µg/million cells, IF: 1-2 µg/ml, IHC-P: 1-2 µg/ml
Reactivity:	Human
Immunogen:	Recombinant full-length human SOD1 protein.
Host:	Mouse
Clonality:	Monoclonal
Clone ID:	SOD1/3923
Isotype:	IgG2b
Light Chains:	kappa
Conjugate:	Unconjugated
Purification:	Protein A/G chromatography.
Concentration:	200 µg/ml
Product Form:	Liquid
Formulation:	Supplied in 10mM Phosphate Buffered Saline with 0.05% BSA and 0.05% Sodium Azide.
Storage:	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

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Specifications continued:

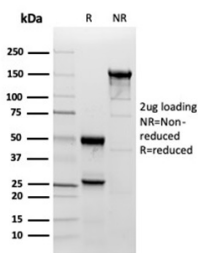
General Notes:

This monoclonal antibody is also available in a different formulation without BSA and Sodium Azide - Anti-Superoxide Dismutase 1 Antibody [SOD1/3923] - BSA and Azide free (A278383).

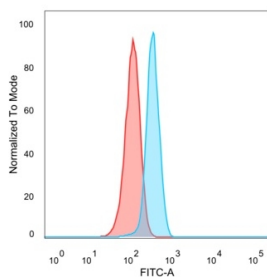
Disclaimer:

This product is for research use only. It is not intended for diagnostic or therapeutic use.

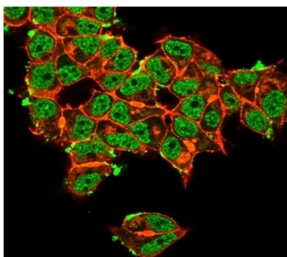
Images:



SDS-PAGE analysis of Anti-Superoxide Dismutase 1 Antibody [SOD1/3923] under non-reduced and reduced conditions; showing intact IgG and intact heavy and light chains, respectively. SDS-PAGE analysis confirms the integrity and purity of the antibody.



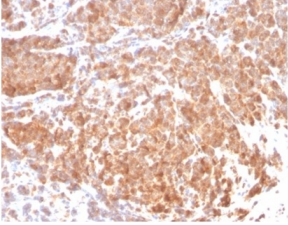
Flow cytometric analysis of PFA-fixed MCF-7 cells using Anti-Superoxide Dismutase 1 Antibody [SOD1/3923] followed by Goat Anti-Mouse IgG (CF® 488) (Blue). Unstained cells (Red).



Immunofluorescent analysis of PFA-fixed MCF-7 cells stained with Anti-Superoxide Dismutase 1 Antibody [SOD1/3923] followed by Goat Anti-Mouse IgG (CF® 488) (Green). CF® 640A Phalloidin (Red).

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Images continued:



Immunohistochemical analysis of formalin-fixed, paraffin-embedded human prostate using Anti-Superoxide Dismutase 1 Antibody [SOD1/3923] at 2 μ g/ml in PBS for 30 minutes at room temperature.