

SODM Antibody
Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8491b

Specification

SODM Antibody - Product Information

Application	WB, IHC-P, FC,E
Primary Accession	P04179
Reactivity	Human, Mouse
Host	Mouse
Clonality	monoclonal
Isotype	IgG1,κ
Calculated MW	24750

SODM Antibody - Additional Information

Gene ID 6648

Other Names

Superoxide dismutase [Mn], mitochondrial, SOD2

Target/Specificity

This SODM antibody is generated from a mouse immunized with a recombinant protein of human SODM.

Dilution

WB~~1:2000

IHC-P~~1:25

FC~~1:25

E~~Use at an assay dependent concentration.

Format

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

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

SODM Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

SODM Antibody - Protein Information

Name SOD2

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

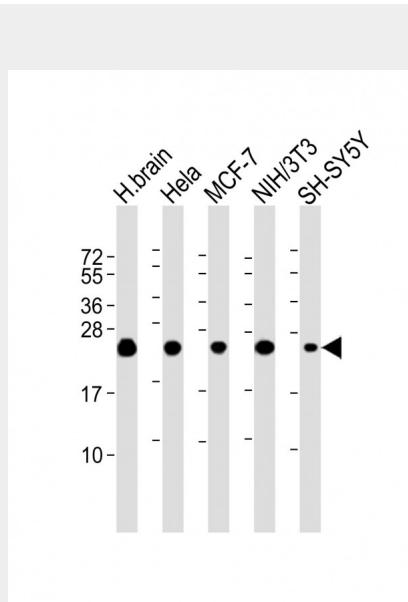
Cellular Location

Mitochondrion matrix.

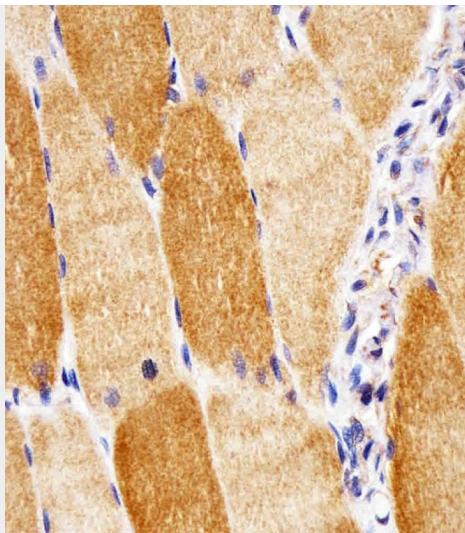
SODM Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

SODM Antibody - Images

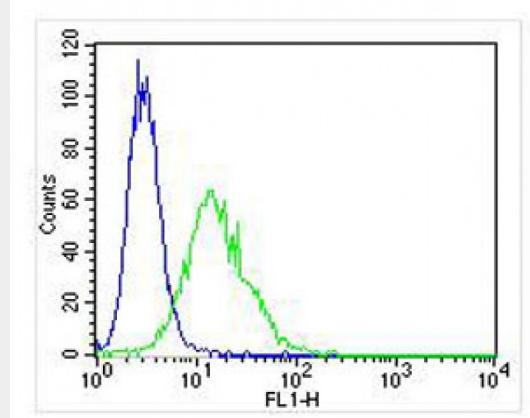
All lanes : Anti-SODM Antibody at 1:2000 dilution Lane 1: human brain lysate Lane 2: Hela whole cell lysate Lane 3: MCF-7 whole cell lysate Lane 4: NIH/3T3 whole cell lysate Lane 5: SH-SY5Y whole cell lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 25 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



AM8491b staining SODM in human skeletal muscle sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0.5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyclonal antibody was used as the secondary antibody.



AM8491b staining SODM in human brain sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0.5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyclonal antibody was used as the secondary antibody.



Overlay histogram showing A549 cells stained with AM8491b (green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then incubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AM8491b, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Mouse IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(NA168821) at 1/400 dilution for 40 min at 37°C. Isotype control antibody (blue line) was mouse IgG1 (1 μ g/1x10⁶ cells) used under the same conditions. Acquisition of >10, 000 events was performed.

SODM Antibody - Background

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

SODM Antibody - References

Wispe J.R., et al. *Biochim. Biophys. Acta* 994:30-36(1989).
Beck Y., et al. *Nucleic Acids Res.* 15:9076-9076(1987).
Heckl K., et al. *Nucleic Acids Res.* 16:6224-6224(1988).
Ho Y.-S., et al. *FEBS Lett.* 229:256-260(1988).
Church S.L., et al. *Biochim. Biophys. Acta* 1087:250-252(1990).