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SODM Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8491b

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	P04179
Reactivity	Human, Rat, Mouse
Host	Mouse
Clonality	monoclonal
Isotype	IgG1,κ
Clone Names	1559CT572.3.83
Calculated MW	24750

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~~1:100~500 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.

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.

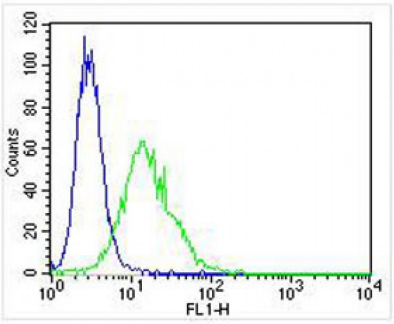
Background

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

References

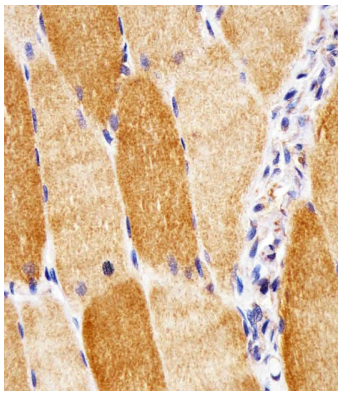
Wispe J.R.,et al.Biochim. Biophys. Acta 994:30-36(1989).
Beck Y.,et al.Nucleic Acids Res. 15:9076-9076(1987).
Heckl K.,et al.Nucleic Acids Res. 16:6224-6224(1988).
Ho Y.-S.,et al.FEBS Lett. 229:256-260(1988).
Church S.L.,et al.Biochim. Biophys. Acta 1087:250-252(1990).

Images



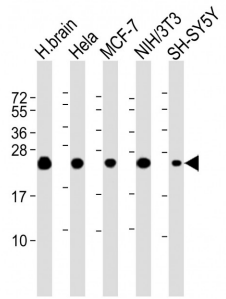
Overlay histogram showing A549 cells stained with AM8491b (green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AM8491b, 1:25 dilution) for 60 min at 37ºC. The secondary antibody used was Goat-Anti-Mouse IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(NA168821) at 1/400 dilution for 40 min at 37ºC. Isotype control antibody (blue line) was mouse IgG1 (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.

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 polyvalent antibody was used as the secondary antibody.



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 polyvalent antibody was used as the secondary antibody.

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 µg 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.