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Mouse Monoclonal Antibody to SOD2

Purified Mouse Monoclonal Antibody
Catalog # AO2423a

Product Information

Application	WB, IHC, FC, ICC, E
Primary Accession	P04179
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	8H3D2
Isotype	Mouse IgG1
Calculated MW	24750
Description	This gene is a member of the iron/manganese superoxide dismutase family. It encodes a mitochondrial protein that forms a homotetramer and binds one manganese ion per subunit. This protein binds to the superoxide byproducts of oxidative phosphorylation and converts them to hydrogen peroxide and diatomic oxygen. Mutations in this gene have been associated with idiopathic cardiomyopathy (IDC), premature aging, sporadic motor neuron disease, and cancer. Alternative splicing of this gene results in multiple transcript variants. A related pseudogene has been identified on chromosome 1.;
Immunogen	Purified recombinant fragment of human SOD2 (AA: 1-222) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide
Application Note	ELISA: 1/10000; WB: 1/500 - 1/2000; IHC: 1/200 - 1/1000; ICC: 1/50 - 1/250; FCM: 1/200 - 1/400

Additional Information

Gene ID	6648
Other Names	IPOB; IPO-B; MNSOD; MVCD6; Mn-SOD
Dilution	WB~~1:1000 IHC~~1:100~500 FC~~1:10~50 ICC~~N/A E~~N/A
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Mouse Monoclonal Antibody to SOD2 is for research use only and not for use in diagnostic or therapeutic procedures.

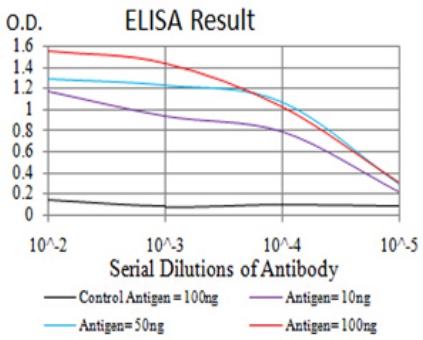
Protein Information

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.

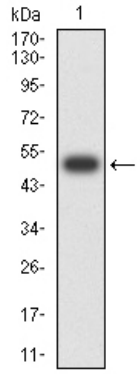
References

1.Dis Markers. 2015;2015:746329. ; 2.Free Radic Biol Med. 2015 Dec;89:379-86.;

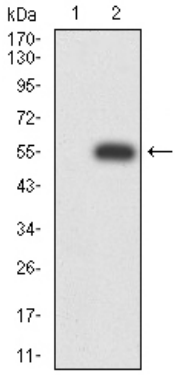
Images



Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)

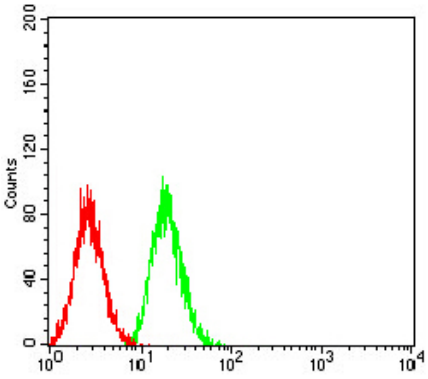


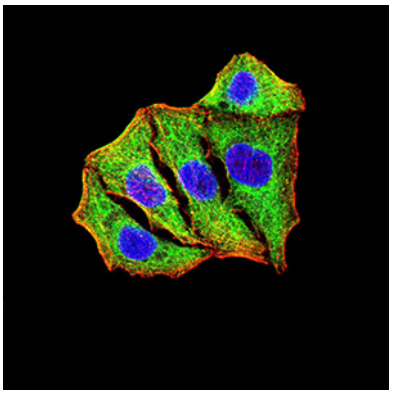
Western blot analysis using SOD2 mAb against human SOD2 (AA: 1-222) recombinant protein. (Expected MW is 50.7 kDa)



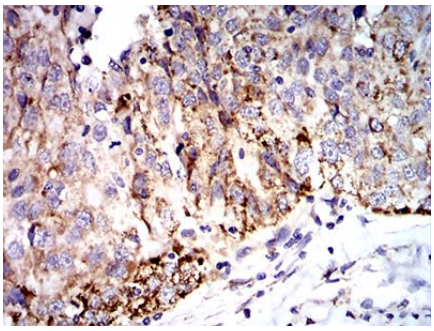
Western blot analysis using SOD2 mAb against HEK293 (1) and SOD2 (AA: 1-222)-hIgGFc transfected HEK293 (2) cell lysate.

Flow cytometric analysis of Hela cells using SOD2 mouse mAb (green) and negative control (red).

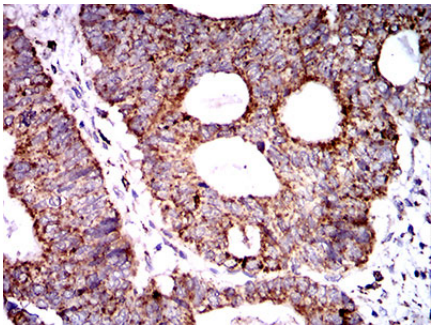




Immunofluorescence analysis of Hela cells using SOD2 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin. Secondary antibody from Fisher



Immunohistochemical analysis of paraffin-embedded ovarian cancer tissues using SOD2 mouse mAb with DAB staining.



Immunohistochemical analysis of paraffin-embedded rectum cancer tissues using SOD2 mouse mAb with DAB staining.