

# Mouse Monoclonal Antibody to SOD2

Purified Mouse Monoclonal Antibody

Catalog # AO2424a

## Product Information

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<b>Application</b>	WB, IHC, FC, E
<b>Primary Accession</b>	<a href="#">P04179</a>
<b>Reactivity</b>	Human
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Clone Names</b>	8H3F9
<b>Isotype</b>	Mouse IgG1
<b>Calculated MW</b>	24750
<b>Description</b>	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.;
<b>Immunogen</b>	Purified recombinant fragment of human SOD2 (AA: 1-222) expressed in E. Coli.
<b>Formulation</b>	Purified antibody in PBS with 0.05% sodium azide
<b>Application Note</b>	ELISA: 1/10000; WB: 1/500 - 1/2000; IHC: 1/200 - 1/1000; FCM: 1/200 - 1/400

## Additional Information

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<b>Gene ID</b>	6648
<b>Other Names</b>	IPOB; IPO-B; MNSOD; MVCD6; Mn-SOD
<b>Dilution</b>	WB~~1:1000 IHC~~1:100~500 FC~~1:10~50 E~~N/A
<b>Storage</b>	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.
<b>Precautions</b>	Mouse Monoclonal Antibody to SOD2 is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

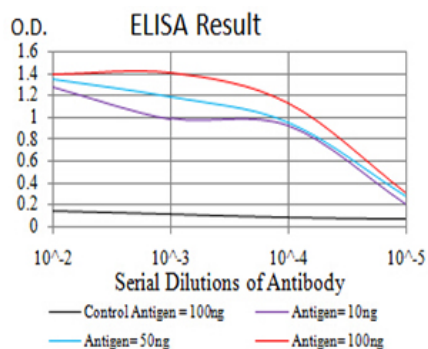
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<b>Name</b>	SOD2
<b>Function</b>	Destroys superoxide anion radicals which are normally produced within the cells and which are toxic to biological systems.
<b>Cellular Location</b>	Mitochondrion matrix.

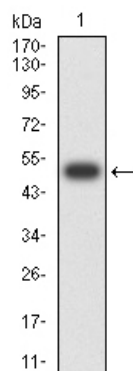
## References

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

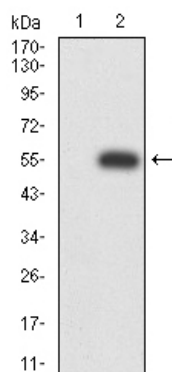
## Images



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

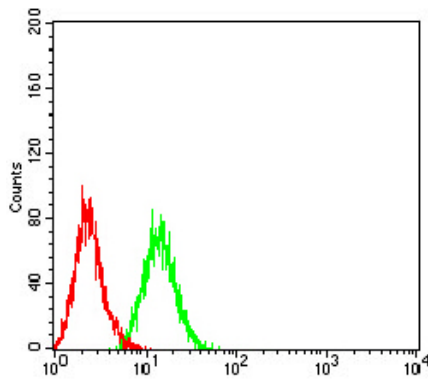
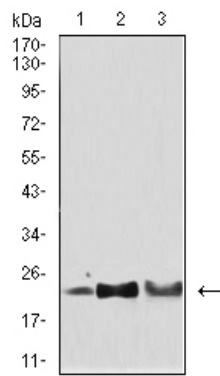


Western blot analysis using SOD2 mAb against human SOD2 (AA: 1-222) recombinant protein. (Expected MW is 50.7 kDa)

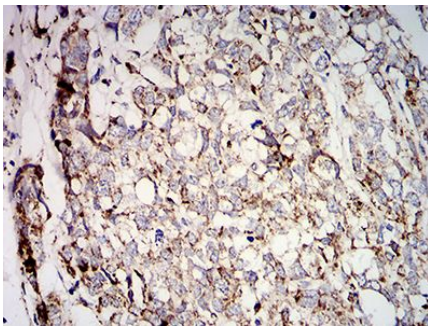


Western blot analysis using SOD2 mAb against HEK293 (1) and SOD2 (AA: 1-222)-hIgGFc transfected HEK293 (2) cell lysate.

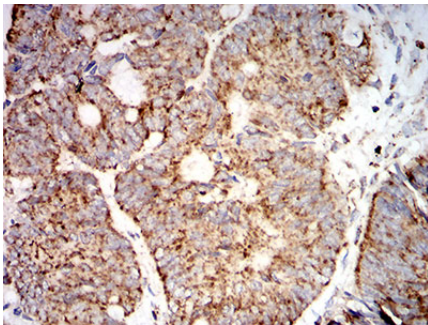
Western blot analysis using SOD2 mouse mAb against Hela (1), HepG2 (2), and SH-SY5Y (3) cell lysate.



Flow cytometric analysis of MCF-7 cells using SOD2 mouse mAb (green) and negative control (red).



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



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.