

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Product datasheet for TA500495

Superoxide Dismutase 1 (SOD1) Mouse Monoclonal Antibody [Clone ID: OTI8B10]

Product data:

Product Type: Primary Antibodies

Clone Name: OTI8B10

Applications: FC, IHC, WB

Recommend Dilution: WB 1:1000~2000, IHC 1:50, FLOW 1:100

Reactivity: Human
Host: Mouse
Isotype: IgG2b

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human SOD1 (NP_000445) produced in HEK293T

cell

Formulation: PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.

Concentration: 1 mg/ml

Purification: Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Predicted Protein Size: 15.8 kDa

Gene Name: superoxide dismutase 1

Database Link: NP 000445 Entrez Gene 6647 Human

Background: The protein encoded by this gene binds copper and zinc ions and is one of two isozymes

responsible for destroying free superoxide radicals in the body. The encoded isozyme is a soluble cytoplasmic protein, acting as a homodimer to convert naturally-occuring but harmful superoxide radicals to molecular oxygen and hydrogen peroxide. The other isozyme is a mitochondrial protein. Mutations in this gene have been implicated as causes of familial

amyotrophic lateral sclerosis. Rare transcript variants have been reported for this gene.

[provided by RefSeq]

Synonyms: ALS; ALS1; HEL-S-44; homodimer; hSod1; IPOA; SOD

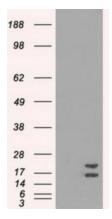
Protein Families: Druggable Genome

Protein Pathways: Amyotrophic lateral sclerosis (ALS), Huntington's disease, Prion diseases

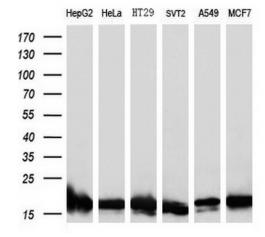




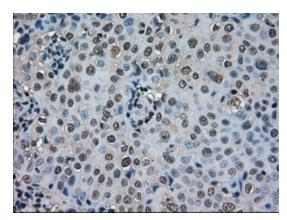
Product images:



HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY SOD1 ([RC200725], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-SOD1. Positive lysates [LY400160] (100ug) and [LC400160] (20ug) can be purchased separately from OriGene.

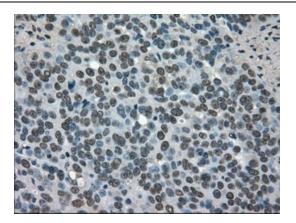


Western blot analysis of extracts (35ug) from 6 different cell lines by using anti-SOD1 monoclonal antibody (HepG2: human; HeLa: human; HT29: human; SVT2: mouse; A549: human; MCF7: human).

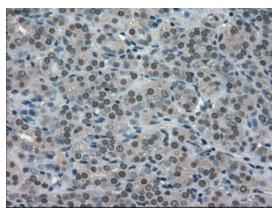


Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human breast tissue using anti-SOD1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA500495)

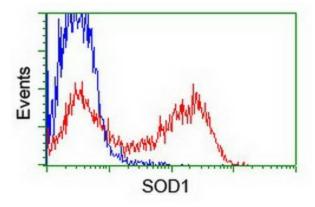




Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human ovary tissue using anti-SOD1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA500495)



Immunohistochemical staining of paraffinembedded Carcinoma of Human thyroid tissue using anti-SOD1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA500495)



HEK293T cells transfected with either [RC200725] overexpress plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-SOD1 antibody (TA500495), and then analyzed by flow cytometry.