

Product datasheet for **TA344296**

SOD2 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	WB
Reactivity:	Human, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	The immunogen for anti-SOD2 antibody: synthetic peptide directed towards the N terminal of human SOD2. Synthetic peptide located within the following region: MLSRVAVCGTSRQLAPVLGYLGSRQKHSLPDLPYDYGALPHINAQIMQLH
Formulation:	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose. <i>Note that this product is shipped as lyophilized powder to China customers.</i>
Purification:	Affinity Purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	24 kDa
Gene Name:	superoxide dismutase 2, mitochondrial
Database Link:	NP_000627 Entrez Gene 24787 Rat Entrez Gene 6648 Human P04179



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Background:

SOD2 is a member of the iron/manganese superoxide dismutase family. SOD2 is 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 encoding SOD2 have been associated with idiopathic cardiomyopathy (IDC), premature aging, sporadic motor neuron disease, and cancer. 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. Alternate transcriptional splice variants, encoding different isoforms, have been characterized.

Synonyms:

IPOB; MNSOD; MVCD6

Note:

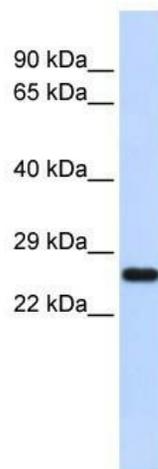
Immunogen Sequence Homology: Dog: 100%; Pig: 100%; Rat: 100%; Goat: 100%; Human: 100%; Sheep: 100%; Bovine: 100%; Rabbit: 100%; Guinea pig: 100%; Horse: 93%; Mouse: 93%; Zebrafish: 86%

Protein Families:

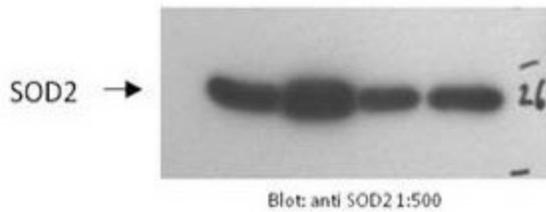
Druggable Genome, Transcription Factors

Protein Pathways:

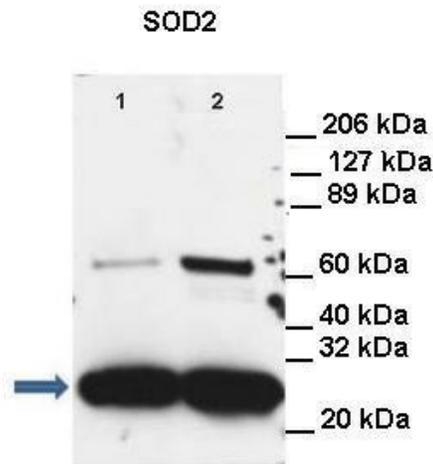
Huntington's disease

Product images:

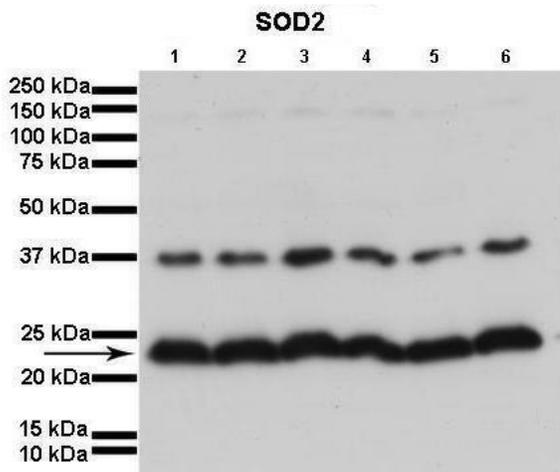
WB Suggested Anti-SOD2 Antibody Titration: 0.2-1 ug/ml; ELISA Titer: 1:1562500; Positive Control: Human Placenta



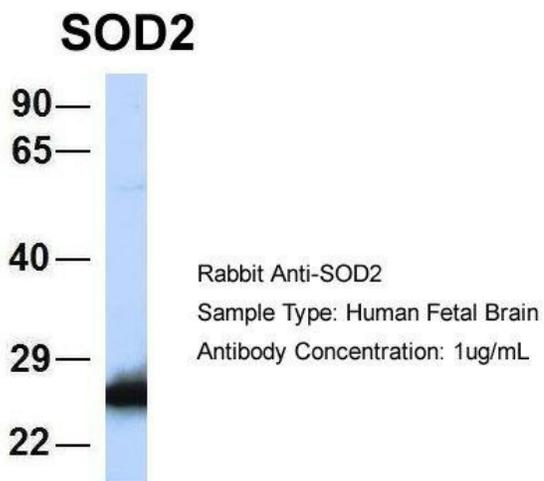
WB Suggested Anti-SOD2 antibody ; Titration: 0.4 ug/ml; Positive Control: Rat dorsal medulla brain & cortex + hypothalamus extract



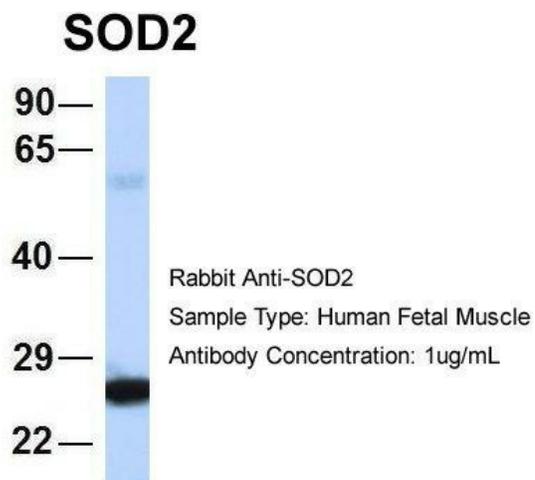
Lanes: 1. 40ug rat dorsal medulla brain extract 2. 20 ug rat cortex + hypothalamus mitochondria extract; Primary Antibody Dilution: 1:2500; Secondary Antibody: Anti-Rabbit HRP; Secondary Antibody Dilution: 1:5000; Gene Name: SOD2; Submitted by: Manisha Na



Lanes: 1. 40 ug HK2 cell (kidney proximal tubular cell line) 2. 40 ug H2O2 treated human HK2 Cell lysate; 3. 40 ug H2O2 treated human HK2 Cell lysate; 4. 40 ug H2O2 treated human HK2 Cell lysate; 5. 40 ug H2O2 treated human HK2 Cell lysate; 6. 40 ug H2O2



5Hum. Fetal Brain; Host: Rabbit; Target Name: NOP56; Sample Tissue: Human Fetal Brain; Antibody Dilution: 1.0 ug/ml



6Hum. Fetal Muscle; Host: Rabbit; Target Name: NOP56; Sample Tissue: Human Fetal Muscle; Antibody Dilution: 1.0 ug/ml