Datasheet for ABIN2782351

anti-SOD1 antibody (N-Term)

4 Images | 1 Publication

Go to Product page

Overview

Quantity:	100 µL
Target:	SOD1
Binding Specificity:	N-Term
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This SOD1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC)

Product Details

Immunogen:	The immunogen is a synthetic peptide directed towards the N terminal region of human SOD1
Sequence:	MATKAVCVLK GDGPVQGIIN FEQKESNGPV KVWGSIKGLT EGLHGFHVHE
Predicted Reactivity:	Human: 100%
Characteristics:	This is a rabbit polyclonal antibody against SOD1. It was validated on Western Blot and immunohistochemistry.
Purification:	Protein A purified

Target Details

Target:	SOD1
Alternative Name:	SOD1 (SOD1 Products)

Target Details

Background:	SOD1 binds copper and zinc ions and is one of two isozymes responsible for destroying free superoxide radicals in the body. This 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 its gene have been implicated as causes of familial amyotrophic lateral sclerosis.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. Alias Symbols: ALS, ALS1, IPOA, SOD, homodimer, hSod1 Protein Interaction Partner: SOD1, CRYAB, UBC, SMAD2, HDAC6, GSH1, OPTN, PRDX5, AHCYL1, TIAL1, PRDX2, SPTBN1, SOD2, PPP2CA, PPIA, PLS3, PRDX1, NME2, NME1, Hspa4l, Hspa4, Hspa2, Hspa1b, Hsph1, Dnaja1, Hspa8, Hspa5, Ccs, UBE3A, COMMD1, Stub1, SUMO4, DYNLT1, AMFR, MARCH5, RNF19A, PSMD4, Protein Size: 154
Molecular Weight:	16 kDa
Gene ID:	6647
NCBI Accession:	NM_000454, NP_000445
UniProt:	P00441
Pathways:	Sensory Perception of Sound, Transition Metal Ion Homeostasis

Application Details

Application Notes:	Optimal working dilutions should be determined experimentally by the investigator.
Comment:	Antigen size: 154 AA
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	Lot specific
Buffer:	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09 % (w/v) sodium azide and 2 %

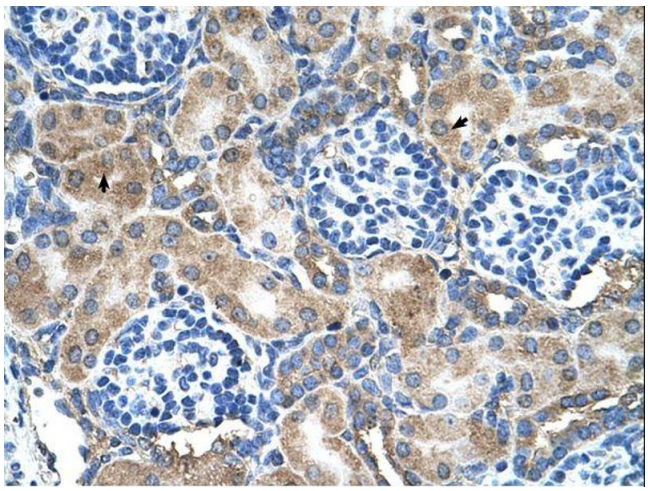
Handling

	sucrose.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-20 °C
Storage Comment:	For short term use, store at 2-8°C up to 1 week. For long term storage, store at -20°C in small aliquots to prevent freeze-thaw cycles.

Publications

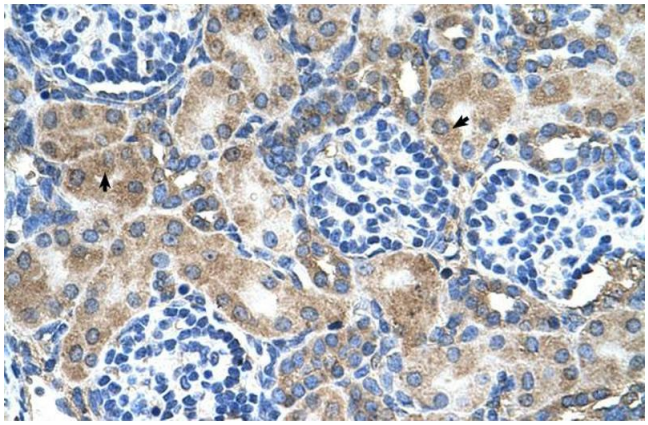
Product cited in:	Hays, Naini, He, Mitsumoto, Rowland: "Sporadic amyotrophic lateral sclerosis and breast cancer: Hyaline conglomerate inclusions lead to identification of SOD1 mutation." in: **Journal of the neurological sciences**, Vol. 242, Issue 1-2, pp. 67-9, (2006) (PubMed).

Images



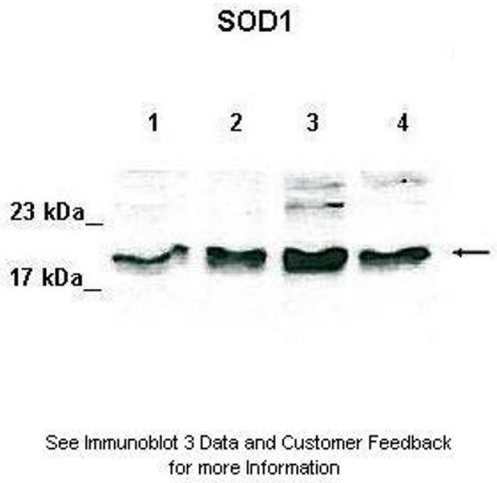
Immunohistochemistry

Image 1.



Immunohistochemistry

Image 2. Human kidney



Western Blotting

Image 3. Lanes: Lane 1: 50ug HeLa lysate Lane 2: 50ug 293T lysate Lane 3: 50ug K562 lysate Lane 4: 50ug MDA-MB-231 lysate Primary Antibody Dilution: 1:500 Secondary Antibody: Anti-rabbit-HRP Secondary Antibody Dilution: 1:1000 Gene Name: SOD1 Submitted by: David Colecchia, Ph.D, Istituto Toscano Tumori, Core Research Laboratory, presso Fondazione Toscana Life Sciences

Please check the product details page for more images. Overall 4 images are available for ABIN2782351.