



Rabbit Anti-SOD1 monoclonal antibody, clone KG2116 (CABT-37098RH)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Target	Superoxide Dismutase 1
Immunogen	Recombinant protein
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human, Rat
Clone	KG2116
Purification	Protein A purified.
Conjugate	Unconjugated
Applications	WB, IHC-F, IHC-P, ICC/IF
Molecular Weight	16 kDa
Cellular Localization	Cytoplasm, Mitochondrion, Nucleus.
Positive Control	293T, MCF-7, Hela, HepG2, rat brain tissue, human liver tissue, human breast carcinoma tissue.
Format	Liquid
Size	100 µl
Buffer	1×TBS (pH7.4), 1% BSA, 40% Glycerol.

Preservative	0.05% Sodium Azide
Storage	Store at +4°C after thawing. Aliquot store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

BACKGROUND

Introduction Cu-Zn superoxide dismutase-1 (SOD-1) is a well characterized cytosolic scavenger of oxygen free radicals that requires copper and zinc binding to potentiate its enzymatic activity. Enzymatically, SOD-1 facilitates the dismutation of oxygen radicals to hydrogen peroxide and also catalyzes pro-oxidant reactions, which include the peroxidase activity and hydroxyl radical generating activity. SOD-1 is ubiquitously expressed in somatic cells and functions as a homodimer. Defects in the gene encoding SOD-1 have been implicated in the progression of neurological diseases, including amyotrophic lateral sclerosis (ALS), a neurodegenerative disease characterized by the loss of spinal motor neurons, Down syndrome and Alzheimer's disease. In familial ALS, several mutations in SOD-1 predominate, resulting in the loss of zinc binding, the loss of scavenging activity of SOD-1, and correlate with an increase in neurotoxicity and motor neuron death.

Keywords ALS;ALS1;Amyotrophic lateral sclerosis 1 adult;Cu/Zn SOD;Cu/Zn superoxide dismutase;Epididymis secretory protein Li 44;HEL S 44;Homodimer;hSod1;Indophenoloxidase A;IPOA;Mn superoxide dismutase;SOD;SOD soluble;SOD1;SOD2;SODC;SODC_HUMAN;Superoxide dismutase [Cu-Zn];Superoxide dismutase 1;Superoxide dismutase 1 soluble;Superoxide dismutase Cu Zn;Superoxide dismutase cytosolic antibody