



Rabbit Anti-SOD2 monoclonal antibody, clone KK1900-12 (CABT-L836)

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

PRODUCT INFORMATION

Target	SOD2
Immunogen	Recombinant protein
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human, Mouse, Rat
Clone	KK1900-12
Purification	Protein A purified.
Conjugate	Unconjugated
Applications	WB, IHC
Molecular Weight	21 kDa
Cellular Localization	Mitochondrion matrix.
Positive Control	SH-SY-5Y, human kidney tissue, mouse liver tissue, human liver tissue, mouse heart tissue, mouse brain tissue, mouse colon 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	The superoxide dismutase family is composed of three metalloenzymes (SOD-1, SOD-2 and SOD-3) that catalyze the oxido-reduction of reactive oxygen species (ROS) such as superoxide anion. The SOD-2 precursor is a 222 amino acid protein that is encoded by nuclear chromatin, synthesized in the cytosol and imported posttranslationally into the mitochondrial matrix. Unlike SOD-1, which is a homodimeric cytosolic Cu-Zn enzyme, SOD-2 is a homotetrameric manganese enzyme (also known as MnSOD) that functions in the mitochondrion. ROS are implicated in a wide range of degenerative processes, including Alzheimer's disease, Parkinson's disease and ischemic heart disease. Homozygous mutant mice, which lack SOD-2, exhibit dilated cardiomyopathy, accumulation of lipid in liver and skeletal muscle, metabolic acidosis, oxidative DNA damage and respiratory chain deficiencies in heart and skeletal muscle. Polymorphisms in the SOD-2 gene have also been implicated in nonfamilial, idiopathic, dilated cardiomyopathy in humans.
Keywords	Indophenoloxidase B;IPO B;IPOB;Manganese containing superoxide dismutase;Manganese SOD;Manganese superoxide dismutase;Mangano superoxide dismutase;Mn SOD;Mn superoxide dismutase;MNSOD;MVCD6;SOD 2;SOD2;SODM_HUMAN;Superoxide dismutase [Mn] mitochondrial;Superoxide dismutase [Mn], mitochondrial;Superoxide dismutase 2 mitochondrial antibody