



# 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

<b>Target</b>	SOD2
<b>Immunogen</b>	Recombinant protein
<b>Isotype</b>	IgG
<b>Source/Host</b>	Rabbit
<b>Species Reactivity</b>	Human, Mouse, Rat
<b>Clone</b>	KK1900-12
<b>Purification</b>	Protein A purified.
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	WB, IHC
<b>Molecular Weight</b>	21 kDa
<b>Cellular Localization</b>	Mitochondrion matrix.
<b>Positive Control</b>	SH-SY-5Y, human kidney tissue, mouse liver tissue, human liver tissue, mouse heart tissue, mouse brain tissue, mouse colon tissue.
<b>Format</b>	Liquid
<b>Size</b>	100 µl
<b>Buffer</b>	1×TBS (pH7.4), 1% BSA, 40% Glycerol.

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

## BACKGROUND

<b>Introduction</b>	<p>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.</p>
<b>Keywords</b>	<p>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</p>