SOD2 Conjugated Antibody

Catalog No: #C49265

Package Size: #C49265-AF350 100ul #C49265-AF405 100ul #C49265-AF488 100ul #C49265-AF555 100ul #C49265-AF594 100ul #C49265-AF647 100ul #C49265-AF680 100ul #C49265-AF750 100ul #C49265-Biotin 100ul

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Description

Product Name	SOD2 Conjugated Antibody
Host Species	Rabbit
Clonality	Monoclonal
Species Reactivity	Hu, Ms, Rt
Immunogen Description	recombinant protein
Conjugates	Biotin AF350 AF405 AF488 AF555 AF594 AF647 AF680 AF750
Other Names	Indophenoloxidase B antibody IPO B antibody IPOB antibody Manganese containing superoxide dismutase antibody Manganese SOD antibody Manganese superoxide dismutase antibody Mangano superoxide dismutase antibody Mn SOD antibody Mn superoxide dismutase antibody MNSOD antibody MVCD6 antibody SOD 2 antibody SOD2 antibody SODM_HUMAN antibody Superoxide dismutase [Mn] mitochondrial antibody Superoxide dismutase [Mn], mitochondrial antibody Superoxide dismutase 2 mitochondrial antibody
Accession No.	Swiss-Prot#:P04179
Uniprot	P04179
GeneID	6648;
Excitation Emission	AF350: 346nm/442nm AF405: 401nm/421nm AF488: 493nm/519nm AF555: 555nm/565nm AF594: 591nm/614nm AF647: 651nm/667nm AF680: 679nm/702nm AF750: 749nm/775nm
Calculated MW	21 kDa
Formulation	0.01M Sodium Phosphate, 0.25M NaCl, pH 7.6, 5mg/ml Bovine Serum Albumin, 0.02% Sodium Azide
Storage	Store at 4°C in dark for 6 months

Application Details

Suggested Dilution:

AF350 conjugated: most applications: 1: 50 - 1: 250

AF405 conjugated: most applications: 1: 50 - 1: 250

AF488 conjugated: most applications: 1: 50 - 1: 250

AF555 conjugated: most applications: 1: 50 - 1: 250

AF594 conjugated: most applications: 1: 50 - 1: 250

AF647 conjugated: most applications: 1: 50 - 1: 250

AF680 conjugated: most applications: 1: 50 - 1: 250

AF750 conjugated: most applications: 1: 50 - 1: 250

Biotin conjugated: working with enzyme-conjugated streptavidin, most applications: 1: 50 - 1: 1,000

Background

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 AlzheimeroŒ½oŒ½s disease, ParkinsonoŒ½oŒ½s 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.

Note: This product is for in vitro research use only