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3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

Anti-SOD2 Antibody Picoband® (monoclonal, 2B12B1) Fluoro594 Conjugated

Catalog Number: M00349-3-Fluoro594

About SOD2

SOD2(Superoxide Dismutase 2), also called IPO-B or MNSOD, is a mitochondrial matrix enzyme that scavenges oxygen radicals produced by the extensive oxidation-reduction and electron transport reactions occurring in mitochondria. This gene is a member of the iron/manganese superoxide dismutase family. Using a somatic cell hybrid panel containing different segments of chromosome 6, they demonstrated that SOD2 is located in the region 6q25.3-qter which, together with the FISH analysis, indicated that SOD2 is in the distal portion of 6q25. The SOD2 gene encodes an intramitochondrial free radical scavenging enzyme that is the first line of defense against superoxide produced as a byproduct of oxidative phosphorylation. Adeno-associated viral delivery of the human SOD2 gene resulted in suppression of optic nerve degeneration and rescue of retinal ganglion cells. The findings suggested that reactive oxygen species contributed to retinal cell death and optic nerve damage in mice with complex I deficiency, and that expression of SOD2 attenuated the disease process.

Overview

Product Name	Anti-SOD2 Antibody Picoband® (monoclonal, 2B12B1) Fluoro594 Conjugated
Reactive Species	Human, Mouse
Application	Recommended applications are based on the parent unconjugated antibody (IHC, WB). Customers may select suitable applications according to their experimental needs.
Clonality	Monoclonal 2B12B1
Formulation	Each vial contains 50% glycerol, 0.9% NaCl, 0.2% Na2HPO4, 0.02% NaN3.
Storage Instructions	At -20˚C for one year from date of receipt. Avoid repeated freezing and thawing. Protect from light.
Host	Mouse
Uniprot ID	P04179

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human SOD2, different from the related mouse sequence by one amino acid, and from the related rat sequence by four amino acids.
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Mouse IgG2b
Form	Liquid
Concentration	0.5 mg/mL

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Purification	Immunogen affinity purified.
Conjugate	Fluoro594 Excitation Wavelength: 593 nm Emission Wavelength: 618 nm
Suggested Dilutions	Optimal dilutions should be determined by end users.

3 Publications Citing This Product

1. PubMed ID: 10.1038/srep30146, Maternal inflammation activated ROS-p38 MAPK predisposes offspring to heart damages caused by isoproterenol via augmenting ROS generation

2. PubMed ID: 10.1002/lsm.22570, Nonpigmented hair removal using photodynamic therapy in animal model

3. PubMed ID: 10.1016/j.taap.2016.05.009, Sinomenine attenuates renal fibrosis through Nrf2-mediated inhibition of oxidative stress and TGFbeta signaling

Visit bosterbio.com/anti-sod2-picoband-trade-antibody-m00349-3-boster.html to see all 3 publications.

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