www.antibodiesinc.com
orders@antibodiesinc.com
530-758-4400

Product Datasheet

Anti-SARM1 Antibody FL490 Conjugate

Overview

Catalog #	77-522-FL490
Conjugate	FL490 Ex: 491 nm, Em: 515 nm
Isotype	IgG2b
Clone Number	6174-11
Size	200 µL
Concentration	0.5 mg/mL
Host Species	Mouse Monoclonal
Format	Purified by Protein A chromatography
Buffer	PBS with 0.09% azide
Applications	ICC, IHC
Species Reactivity	Human, Mouse, and Rat
Immunogen	Fusion protein amino acids 51-724 of human SARM1 (accession number Q6SZW1) produced recombinantly in E. Coli.
Molecular Weight	73 kDa
Cite this Antibody	Antibodies Inc Cat# 77-522-FL490, RRID: AB_2940712

Details

Target Description

SARM1 (Sterile Alpha and TIR Motif-Containing 1) is predominantly expressed in the nervous system, particularly in neurons, and is highly conserved across different species. It encodes a protein that contains several functional domains, including a sterile alpha motif (SAM) domain, a Toll/interleukin-1 receptor (TIR) domain, and a catalytic domain with NAD^+ hydrolase activity. SARM1 activation triggers a cascade of molecular events that leads to the breakdown of axonal structures and eventual degeneration. In response to injury, SARM1 is activated and catalyzes cleavage of NAD+ into ADP-D-ribose (ADPR), cyclic ADPR (cADPR) and nicotinamide. In the nervous system, NAD+ depletion is a critical step in the axonal degeneration process, known as Wallerian degeneration, and is essential for clearing damaged axons to allow for regeneration and repair. Inhibition of SARM1 or the preservation of NAD+ levels has been shown to protect axons from degeneration in experimental models, suggesting SARM1 as a potential therapeutic target for neurodegenerative diseases and nerve injuries.Research on SARM1 has primarily focused on its role in axonal degeneration and neuroprotection. Understanding the molecular mechanisms underlying SARM1 activation and its downstream effects may have implications for developing treatments for various neurological disorders, such as peripheral neuropathies, traumatic brain injury, and neurodegenerative diseases like Parkinson's and Alzheimer's.

Specificity	No cross-reactivity reported
Purification Method	Produced by in vitro bioreactor culture of hybridoma line followed by Protein A affinity chromatography and conjugation of purified mAb. Purified mAbs are >90% specific antibody.
Quality Control Tests	Each new lot of antibody is quality control tested by western blot on rat whole brain lysate and confirmed to stain the expected molecular weight band.
Storage	Aliquot and store at ≤ -20°C for long term storage. For short term storage, store at 2-8°C. For maximum recovery of product, centrifuge the vial prior to removing the cap.

Our Guarantee

As an original manufacturer, we are dedicated to creating quality and reproducible antibodies that further your research. We provide personalized customer support from the scientists that made the antibody and offer a free replacement or 100% refund if we cannot resolve an issue. Order today and experience our 50+ year passion for science.