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PRODUCT DATASHEET

Anti-GIT1 Antibody FL490 Conjugate

NeuroMab KO Validated

Product Details

Available Variants	200 µL (SKU:75-094-FL490)
Conjugate	FL490 Ex: 491 nm, Em: 515 nm
Isotype	IgG1
Clone	N39B/8
Gene Name	Git1
Host Species	Mouse
Concentration	Lot dependent: provided at 0.3-0.5 mg/mL
Format	Purified by Protein A chromatography
Physical State	Liquid
Buffer	PBS with 0.09% azide
Production Notes	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.
Applications	IHC
Species Reactivity	Human, Mouse, Rat
Immunogen	Fusion protein amino acids 375-770 (C-terminus) of rat GIT1(accession number Q9Z272) produced recombinantly in E. Coli
Specificity	No cross-reactivity against GIT2
Molecular Weight	90 kDa
Quality Control	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.

Antibody Registry ID AB_2939348

UniProt ID Q9Z272

UniProt Summary: GTPase-activating protein for ADP ribosylation factor family members, including ARF1. Multidomain scaffold protein that interacts with numerous proteins and therefore participates in many cellular functions, including receptor internalization, focal adhesion remodeling, and signaling by both G protein-coupled receptors and tyrosine kinase receptors. Through PAK1 activation, positively regulates microtubule nucleation during interphase. Plays a role in the regulation of cytokinesis; for this function, may act in a pathway also involving ENTR1 and PTPN13. May promote cell motility both by regulating focal complex dynamics and by the activation of RAC1. May act as scaffold for MAPK1/3 signal transduction, recruiting MAPK1/3 to focal adhesions after EGF stimulation via a Src-dependent pathway, hence stimulating cell migration. Plays a role in brain development and function. Involved in the regulation of spine density and synaptic plasticity that is required for processes involved in learning. Plays an important role in dendritic spine morphogenesis and synapse formation. In hippocampal neurons, recruits guanine nucleotide exchange factors (GEFs), such as ARHGEF7/beta-PIX, to the synaptic membrane. These in turn locally activate RAC1, which is an essential step for spine morphogenesis and synapse formation. May contribute to the organization of presynaptic active zones through oligomerization and formation of a Piccolo/PCLO-based protein network, which includes ARHGEF7/beta-PIX and FAK1. In neurons, through its interaction with liprin-alpha family members, may be required for AMPA receptor (GRIA2/3) proper targeting to the cell membrane. In complex with GABA(A) receptors and ARHGEF7, plays a crucial role in regulating GABA(A) receptor synaptic stability, maintaining GPHN/gephyrin scaffolds and hence GABAergic inhibitory synaptic transmission, by locally coordinating RAC1 and PAK1 downstream effector activity, leading to F-actin stabilization. May also be important for RAC1 downstream signaling pathway through PAK3 and regulation of neuronal inhibitory transmission at presynaptic input. Required for successful bone regeneration during fracture healing. The function in intramembranous ossification may, at least partly, exerted by macrophages in which GIT1 is a key negative regulator of redox homeostasis, IL1B production, and glycolysis, acting through the ERK1/2/NRF2/NFE2L2 axis. May also play a role in angiogenesis during fracture healing. In this process, may regulate activation of the canonical NF-kappa-B signal in bone mesenchymal stem cells by enhancing the interaction between NEMO and 'Lys-63'-ubiquitinated RIPK1/RIP1, eventually leading to enhanced production of VEGFA and others angiogenic factors. Essential for VEGF signaling through the activation of phospholipase C-gamma and ERK1/2, hence may control endothelial cell proliferation and angiogenesis.

Country of Origin United States

Shipping	Shipped on ice packs
Expiration	12 months from date of receipt
Usage Statement	These antibodies are to be used as research laboratory reagents and are not for use as diagnostic or therapeutic reagents in humans.
NCBI Gene ID	83709

Product Images



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