

ARG67042 anti-TrkB antibody [SQab30321]

Package: 100 µl
Store at: -20°C

Summary

Product Description	Recombinant rabbit Monoclonal antibody [SQab30321] recognizes TrkB
Tested Reactivity	Hu
Tested Application	IHC-P
Host	Rabbit
Clonality	Monoclonal
Clone	SQab30321
Isotype	IgG
Target Name	TrkB
Species	Human
Immunogen	Synthetic peptide of Human TrkB.
Conjugation	Un-conjugated
Alternate Names	NTRK2, Neurotrophic Receptor Tyrosine Kinase 2, TRKB, BDNF/NT-3 Growth Factors Receptor, Neurotrophic Tyrosine Kinase Receptor Type 2, Tropomyosin-Related Kinase B, EC 2.7.10.1, GP145-TrkB, Trk-B, Neurotrophic Tyrosine Kinase, Receptor, Type 2, BDNF-Tropomyosine Receptor Kinase B, Tyrosine Kinase Receptor B, TrkB Tyrosine Kinase, EC 2.7.10, EIEE58, DEE58, OBHD

Application Instructions

Application table	Application	Dilution
	IHC-P	1:50 - 1:100
Application Note	The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	Human brain	

Properties

Form	Liquid
Purification	Purification with Protein A.
Buffer	PBS, 0.01% Sodium azide, 40% Glycerol and 0.05%BSA.
Preservative	0.01% Sodium azide
Stabilizer	40% Glycerol and 0.05%BSA
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	NTRK2
Gene Full Name	Neurotrophic Receptor Tyrosine Kinase 2
Background	This gene encodes a member of the neurotrophic tyrosine receptor kinase (NTRK) family. This kinase is a membrane-bound receptor that, upon neurotrophin binding, phosphorylates itself and members of the MAPK pathway. Signalling through this kinase leads to cell differentiation. Mutations in this gene have been associated with obesity and mood disorders. Alternative splicing results in multiple transcript variants. [provided by RefSeq, May 2014]
Function	Upon ligand-binding, undergoes homodimerization, autophosphorylation and activation. Recruits, phosphorylates and/or activates several downstream effectors including SHC1, FRS2, SH2B1, SH2B2 and PLCG1 that regulate distinct overlapping signaling cascades. Through SHC1, FRS2, SH2B1, SH2B2 activates the GRB2-Ras-MAPK cascade that regulates for instance neuronal differentiation including neurite outgrowth. Through the same effectors controls the Ras-PI3 kinase-AKT1 signaling cascade that mainly regulates growth and survival. Through PLCG1 and the downstream protein kinase C-regulated pathways controls synaptic plasticity. Thereby, plays a role in learning and memory by regulating both short term synaptic function and long-term potentiation. PLCG1 also leads to NF-Kappa-B activation and the transcription of genes involved in cell survival. Hence, it is able to suppress anoikis, the apoptosis resulting from loss of cell-matrix interactions. May also play a role in neurotrophin-dependent calcium signaling in glial cells and mediate communication between neurons and glia. [UniProt]
Calculated Mw	92 kDa
PTM	Phosphorylated. Undergoes ligand-mediated autophosphorylation that is required for interaction with SHC1 and PLCG1 and other downstream effectors. Isoform TrkB-T-Shc is not phosphorylated. Ubiquitinated. Undergoes polyubiquitination upon activation; regulated by NGFR. Ubiquitination regulates the internalization of the receptor. [UniProt]
Cellular Localization	Cell membrane, Cell projection, Cytoplasm, Endosome, Membrane, Synapse

Images



ARG67042 anti-TrkB antibody [SQab30321] IHC-P image

Immunohistochemistry: Formalin-fixed and paraffin-embedded human brain tissue stained with ARG67042 anti-TrkB antibody [SQab30321].