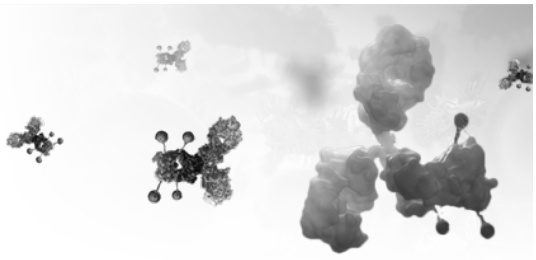

Mouse anti-Human TrkB monoclonal antibody, clone 58/UslC (CABT-B9354)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Immunogen	Human TrkB aa. 156-322
Isotype	IgG1
Source/Host	Mouse
Species Reactivity	Rat
Clone	58/UslC
Purification	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Conjugate	Unconjugated
Applications	WB; FM; Bioimaging; IP
Format	Liquid
Concentration	250 μg/ml
Size	50 μg, 150 μg
Buffer	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.
Storage	Store undiluted at -20°C.

BACKGROUND

Introduction	The full-length TrkB gene has been reported to encode for a 145 kDa glycosylated

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	transmembrane tyrosine kinase and neurotrophin receptor. The same gene also has been reported to encode for a 95 kDa glycoprotein that is identical to gp145 [TrkB] at the extracellular domain and transmembrane portion but lacks the intracellular portion. TrkB has been observable in a range of 116-145 kD and 70-95 kD due to various TrkB maturation states, subcellular localizations, and glycosylation states. TrkB belongs to a family of tyrosine kinases that include the TrkA proto-oncogene and TrkC. All have an extracellular ligand-binding domain, a transmembrane region, and intracellular kinase and autophosphorylation domains. TrkB binds the neurotrophins NT3 and NT4/5, as well as brain-derived neurotrophic factor (BDNF), a peptide that helps motor neuron survival and repair. The TrkB tyrosine kinase is activated upon binding to BDNF resulting in autophosphorylation of residues Y670, Y674 and Y675 and the subsequent association of several intracellular proteins like PLCγ, Shc, and PI3-Kinase. TrkB is widely expressed in cells of neuroepithelium and neural crest origin. Some of these include motor neurons, dopamine-producing neurons, and neurons which release γ-aminobutyric acid in the substantia nigra, neocortex, and hippocampus. The two TrkB gene products are differentially expressed in regions of the adult brain.
Keywords	NTRK2; neurotrophic tyrosine kinase, receptor, type 2; TRKB; trk-B; GP145-TrkB; BDNF/NT-3 growth factors receptor; tyrosine kinase receptor B; tropomyosin-related kinase B; BDNF-tropomyosine receptor kinase B;

GENE INFORMATION

Entrez Gene ID	4915
UniProt ID	Q16620

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