Rabbit antibody to the Tyrosine Kinase Receptor B (TrkB): whole serum

Catalogue No.:	R-149-100
Description:	TrkB is a member of the neurotrophic tyrosine receptor kinase family. It is a membrane-bound receptor and upon neurotrophin binding, it phosphorylates itself as well as MAPK pathways members. TrkB is the receptor for brain-derived neurotrophic factor (BDNF), neurotrophin-3 and neurotrophin-4/5 but not nerve growth factor (NGF). It is Involved in the development and/or maintenance of the nervous system. SUBUNIT: Exists in a dynamic equilibrium between monomeric (low affinity) and dimeric (high affinity) structures. SUBCELLULAR LOCATION: Membrane; single-pass type I membrane protein. ALTERNATIVE PRODUCTS: 4 named isoforms produced by alternative splicing. Additional isoforms seem to exist. TISSUE SPECIFICITY: The different forms are differentially expressed in various cell types. SIMILARITY: Belongs to the Tyr protein kinase family. Insulin receptor subfamily. SIMILARITY: Contains 2 Ig-like C2-type (immunoglobulin-like) domains. SIMILARITY: Contains 2 LRR (leucine-rich) repeats. SIMILARITY: Contains 1 protein kinase domain. Mutations in the TrkB gene have been associated with obesity and mood disorders.
Batch No.:	See product label
Unit size:	100 µl
Antigen:	Extracellular domain of glycosylated mouse TrkB protein produced in CHO cells was used as the immunogen. As shown for similar antisera, it is anticipated that this antibody will block the TrkB receptor binding of corresponding neurotrophin ligand.
Other Names:	Tropomyosin-related kinase receptor; BDNF/NT-3 growth factors receptor; Neurotrophic tyrosine kinase receptor type 2; TrkB tyrosine kinase; GP145-TrkB/GP95-TrkB; Trk-B; Ntrk2
Accession:	NTRK2_MOUSE
Produced in:	Rabbit
Purity:	Whole serum
Applications:	IF (1:1000-1:3000), 1-site ELISA (1:10,000 dilution). A dilution of 1:1000 to 1:3000 o/n is recommended for IF. 4% PFA frozen sections tested. Not yet tested on paraffin embedded tissues. Use triton X-100 permeabilizaiton with frozen sections. Biosensis recommends optimal dilutions/concentrations should be determined by the end user.
Specificity:	Specificity was demonstrated by immunohistochemistry. This antibody was used to stain cryostat sections of the rat peripheral sensory ganglia.
Cross-reactivity:	Reacts with rat and mouse TrkB. Other species have not yet been tested.
Form:	Lyophilised
Reconstitution:	Reconstitute in 100 µl of sterile water. Centrifuge to remove any insoluble material.
Storage:	After reconstitution keep aliquots at -20°C for a higher stability, and at 4°C with an appropriate antibacterial agent. Glycerol (1:1) may be added for an additional stability. Avoid repetitive freeze/thaw cycles.
Specific References:	Penzo MA, et al (2015) The paraventricular thalamus controls a central amygdala fear circuit.

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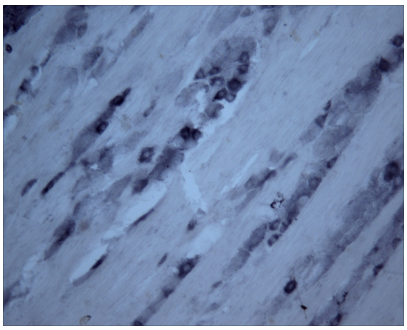
General References: Desmet CJ, Peeper DS (2006) Cell Mol Life Sci. 63(7-8) pp. 755-9 Mizoguchi Y et al., J Immunol. 2009 Dec 15;183(12):7778-86. Spencer-Segal JL et al. J Neurosci. 2011 May 4;31(18):6780-90. Nakajima K et al. Glia. 1998 Nov;24(3):272-89.



Immunohistochemical staining of Tyrosine Kinase Receptor B (TrkB) in rat trigeminal nerve (free floating cryostat section) using rabbit antibody (R-149-100) at a dilution of 1 in 3000. Courtesy of Professor Xin Fu Zhou, The Flinders University of South Australia.

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