

Product datasheet for TP526130

Ntrk2 (NM_001025074) Mouse Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Mouse neurotrophic tyrosine kinase, receptor, type 2 (Ntrk2), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug
Species:	Mouse
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>MR226130 representing NM_001025074 Red=Cloning site Green=Tags(s)

MSPWLKWHGPAMARLWGLCLLVLFWRASLACPTSCCKSSARIWCTEPPSGIVAFPRLEPNSVDPENITE
ILIANQKRLEIINEDDVEAYVGLRNLTIIVDSGLKFVAYKAFLKNSNLRHINFTRNKLTSLSRHRFRHLDL
SDLILTGNPFTCSCDIMWLKTLQETKSSPDTQDLYCLNESSKNMPLANLQIPNCGLP SARLAAPNLVVEE
GKSVTLSCSVGGDPLPTLYWDVGNLVSKHMNETSHTQGSLRITNISSDDSGKQISCAENLVGEDQDSVN
LTVHFAPTITFLESPTSDHHWCIPFTVRGNPKPALQWFYNGAILNESKYICTKIHVTNHTTEYHGCLQLDN
PTHMNNGDYTLMAKNEYGKDERQISAHFMGRPGVDYETNPNYPEVLYEDWTTPTDIGDTTNKSNEIPSTD
VADQSNREHLSVYAVVVIASVWGFCLLVMLLLLKLARHSKFGMKGPASVISNDDDSASPLHHISNGSNTP
SSSEGGPDAVIIGMTKIPVIENPQYFGITNSQLKPDTFVQHIKRHNIVLKRELGEFAGFKVFLAECYNLC
PEQDKILVAVKTLKDasDNARKDFHREAELLNLQHEHIVKFYGVCEGDPLIMVFYMKHGDNLKFLRA
HGPDAVLMAEGNPPELTQSQMLHIAQQAAGMVYLASQHFVHRDLATRNCLVGENLLVKIGDFGMSRDV
YSTDYYRVGGHTMLPIRWMPPESIMYRKFTTESDVWSLGVVLWEIFTYQKQPWYQLSNNEVIECITQGRV
LQRPRTCPQEVYELMLGCWQREPHTRKNIKSIHTLLQNLAKASPVYLDILG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-MYC/DDK
Predicted MW:	92.6 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C after receiving vials.



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Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	NP_001020245
Locus ID:	18212
UniProt ID:	P15209
RefSeq Size:	4614
Cytogenetics:	13 31.2 cM
RefSeq ORF:	2463
Synonyms:	GP145-TrkB/GP95-TrkB; Tkrb; trk-B; trkB
Summary:	<p>Receptor tyrosine kinase involved in the development and the maturation of the central and the peripheral nervous systems through regulation of neuron survival, proliferation, migration, differentiation, and synapse formation and plasticity. Receptor for BDNF/brain-derived neurotrophic factor and NTF4/neurotrophin-4. Alternatively can also bind NTF3/neurotrophin-3 which is less efficient in activating the receptor but regulates neuron survival through NTRK2. 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. Isoform GP95-TRKB may also play a role in neurotrophin-dependent calcium signaling in glial cells and mediate communication between neurons and glia.</p> <p>[UniProtKB/Swiss-Prot Function]</p>