Human TrkB/NTRK2, Tag Free Protein

HA211672

Product name:	Human TrkB/NTRK2, Tag Free
Species reactivity:	Human
Protein construction description:	A DNA sequence encoding the human TrkB/NTRK2 protein (Q16620-1) (Cys 32-His 430) was expressed with tag free.

Background: The family of Trk receptor tyrosine kinases consists of TrkA, TrkB, and TrkC. While the sequence of these family members is highly conserved, they are activated by different neurotrophins: TrkA by NGF, TrkB by BDNF or NT4, and TrkC by NT3. In the adult nervous system, the Trk receptors regulate synaptic strength and plasticity. TrkA regulates proliferation and is important for development and maturation of the nervous system. Point mutations, deletions, and chromosomal rearrangements (chimeras) cause ligand-independent receptor dimerization and activation of TrkA. TrkA is activated in many malignancies including breast, ovarian, prostate, and thyroid carcinomas. TrkB is overexpressed in tumors such as neuroblastoma, prostate adenocarcinoma and pancreatic ductal adenocarcinoma. In neuroblastomas overexpression of TrkB correlates with unfavorable disease outcome when autocrine loops signaling tumor survival are potentiated by additional overexpression of brain-derived neurotrophic factor (BDNF). An alternatively spliced truncated TrkB isoform lacking the kinase domain is overexpressed in Wilms' tumors and this isoform may act as a dominant-negative to TrkB signaling. Altered TrkC expression and corresponding gene mutations are seen in various forms of cancer, with increased expression a positive prognostic indicator in patients with medulloblastoma.

Purity:	>95% as determined by SDS-PAGE.
Endotoxin:	Less than 1.0 EU per μg by the LAL method.
Fragment region:	TrkB/NTRK2 (32-430)
Source:	HEK293
Accession:	Q16620-1
Predicted molecular mass:	45 kD
Formulation:	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4, 5% Trehalose, 5% mannitol.
Reconstitution:	Reconstitute at 250 μg/ml in sterile water.
Storage:	Please avoid repeated freeze-thaw cycles. Samples are stable for up to twelve months from date of receipt at -20℃ to -80℃ It is recommended that aliquot the reconstituted solution to minimize freeze-thaw cycles.

Images

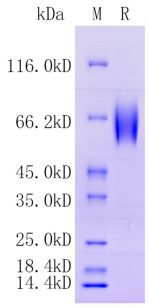


Fig1: Protein on SDS-PAGE under reducing (R) condition.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".