

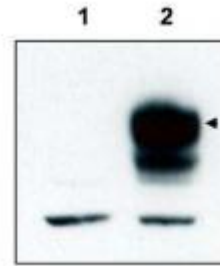
Polyclonal Antibody to TrkCT1 - Aff - Purified

Alternate names:	GP145-TrkC, NT-3 growth factor receptor, NTRK3, Trk-C
Catalog No.:	TA319458
Quantity:	0.1 mg
Concentration:	1.53 mg/ml (by UV absorbance at 280 nm)
Background:	TrkCT1, also named neurotrophic tyrosine kinase receptor type 3 (Ntrk3) non-catalytic isoform 2, is a non-catalytic isoform of TrkC, the high affinity receptor for Neurotrophin-3 (NT-3). This isoform lacks the kinase domain that is responsible for signaling by the full-length isoform. TrkCT1 is the product of an alternative splicing of Ntrk3 that leaves the extracellular and transmembrane domains intact but includes a shorter intracellular domain encoded by exons 13b and 14b. Recent studies indicate that the short cytoplasmic tail binds the scaffold protein Tamalin in a ligand-dependent manner and further activates the Arf6–Rac1 signaling pathway (Esteban et al., 2006).
Host / Isotype:	Rabbit / IgG
Immunogen:	Synthetic peptide corresponding to amino acids near the carboxyl terminus of mouse TrkCT1 protein
Format:	State: Liquid purified Ig Purification: Affinity chromatography Buffer System: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 containing 0.01% (w/v) Sodium Azide
Applications:	ELISA: 1/5,000 - 1/20,000. Western Blot: 1/1,000 - 1/10,000. Immunoprecipitation: 1 µg. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody is directed against TrkCT1 protein.
Species Reactivity:	Tested: Mouse. Expected from sequence similarity: Human, Rat.
Storage:	Store the antibody at -20°C. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
General Readings:	1. Esteban PF, Yoon HY, Becker J, Dorsey SG, Caprari P, Palko ME, et al. A kinase-deficient TrkC receptor isoform activates Arf6-Rac1 signaling through the scaffold protein tamalin. J Cell Biol. 2006 Apr 24;173(2):291-9. PubMed PMID: 16636148. 2. Palko ME, Coppola V, Tessarollo L. Evidence for a role of truncated trkC receptor isoforms in mouse development. J Neurosci. 1999 Jan 15;19(2):775-82. PubMed PMID: 9880597. 3. Menn B, Timsit S, Calothy G, Lamballe F. Differential expression of TrkC catalytic and

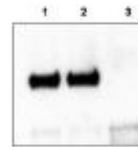
noncatalytic isoforms suggests that they act independently or in association. *J Comp Neurol.* 1998 Nov 9;401(1):47-64. PubMed PMID: 9802700.

Pictures:

Western blot using affinity purified anti-TrkCT1 to detect over-expressed TrkCT1 in HEK293 cells (Lane 2, arrowhead). Lane 1 is a non-transfected control. Cell extracts were resolved by electrophoresis and transferred to nitrocellulose. The membrane was probed with the primary antibody at a 1:3,000 dilution. Personal Communication, V. Coppola, CCR-NCI, Frederick, MD.



Mouse cortex lysate was immunoprecipitated with anti-TrkCT1 antibody and further blotted with affinity purified anti-TrkCT1. Lane 1 is wild-type cortex lysate, Lane 2 is Tamalin knock-out cortex lysate, and Lane 3 is TrkCT1 knock-out cortex lysate. The membrane was probed with the primary antibody at a 1:6,000 dilution. Personal Communication, V. Coppola, CCR-NCI, Frederick, MD.



Western blot using affinity purified anti-TrkCT1 to detect endogenous TrkCT1 in mouse cortex lysate (Lane 1). Lane 2 is TrkCT1 knock-out cortex lysate. Cell extracts were resolved by electrophoresis and transferred to nitrocellulose. The membrane was probed with the primary antibody at a 1:6,000 dilution. Personal Communication, V. Coppola, CCRNCI, Frederick, MD.

