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TRKC Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7688a

Product Information

Application	WB, IHC-P, E
Primary Accession	Q16288
Other Accession	Q03351, P24786, Q6VNS1, Q5IFJ9
Reactivity	Human, Rat, Mouse
Predicted	Monkey, Mouse, Pig, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB1539
Calculated MW	94428
Antigen Region	31-61

Additional Information

Gene ID	4916
Other Names	NT-3 growth factor receptor, GP145-TrkC, Trk-C, Neurotrophic tyrosine kinase receptor type 3, TrkC tyrosine kinase, NTRK3, TRKC
Target/Specificity	This TRKC antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 31-61 amino acids from the N-terminal region of human TRKC.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	TRKC Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	NTRK3
Synonyms	TRKC

Function	Receptor tyrosine kinase involved in nervous system and probably heart development. Upon binding of its ligand NTF3/neurotrophin-3, NTRK3 autophosphorylates and activates different signaling pathways, including the phosphatidylinositol 3-kinase/AKT and the MAPK pathways, that control cell survival and differentiation.
Cellular Location	Membrane; Single-pass type I membrane protein.
Tissue Location	Widely expressed but mainly in nervous tissue. Isoform 2 is expressed at higher levels in adult brain than in fetal brain

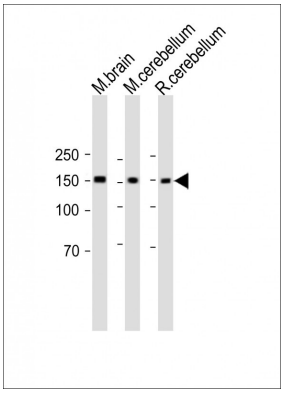
Background

TRKC, a member of the insuline receptor subfamily of Tyr protein kinases, is a receptor for neurotrophin-3 (NT-3). Known substrates for the TRK receptors are SHC, PI-3 kinase, and PLCG1. The different isoforms do not have identical signaling properties. The protein is widely expressed, mainly in the nervous tissue. The isoform B is expressed in a relatively large amount in the adult brain comparatively to fetal brain. TRKC is subject to ligand-mediated auto-phosphorylation. The protein structure contains 2 immunoglobulin-like C2-type domains and 2 leucine-rich (LRR) repeats.

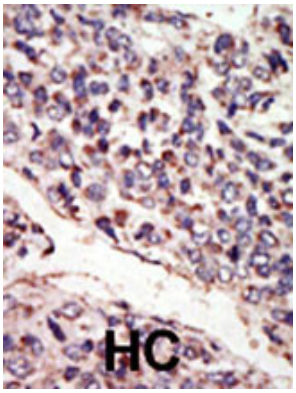
References

McGregor, L.M., et al., Genomics 22(2):267-272 (1994).
Shelton, D.L., et al., J. Neurosci. 15 (1 Pt 2), 477-491 (1995).

Images



All lanes : Anti-TRKC Antibody (N-term) at 1:2000 dilution Lane 1 : Mouse brain lysate Lane 2 : Mouse cerebellum lysate Lane 3 : Rat cerebellum lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size : 140kDa Blocking/Dilution buffer : 5% NFDM/TBST.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.