

Product datasheet for AP06418PU-N

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

TrkA (NTRK1) Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: IF, IHC

Recommended Dilution: Immunohistochemistry on paraffin sections: 1/50-1/200.

Immunofluorescence: 1/50-1/200.

Reactivity: Human

Host: Rabbit

Clonality: Polyclonal

Immunogen: Synthetic peptide, corresponding to amino acids 751-800 of Human Trk A.

Specificity: This antibody detects endogenous levels of Trk A protein.

(region surrounding Ala785)

Formulation: Phosphate buffered saline (PBS), pH 7.2.

State: Aff - Purified

State: Liquid purified lg fraction Preservative: 0.05% sodium azide

Concentration: 1.0 mg/ml

Purification: Affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-

PAGE)

Conjugation: Unconjugated

Storage: Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

Predicted Protein Size: ~ 87 kDa

Gene Name: neurotrophic receptor tyrosine kinase 1

Database Link: Entrez Gene 4914 Human

P04629

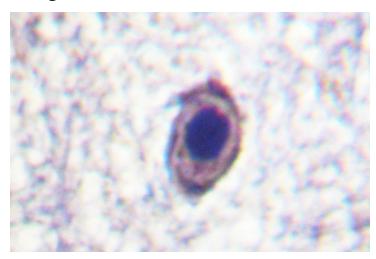


Background:

TrkA, apparent molecular weight 140 kDa, is a high affinity nerve growth factor (NGF). The Trk proto-oncogene family contains four members, TrkA, TrkB, TrkC, and TrkE, which are variably expressed throughout the central and peripheral nervous systems. TrkA binds to nerve growth factor (NGF) and autophosphorylates on tyrosine residues (Tyr490, Tyr674, Tyr675, Tyr751 and Tyr785) to activate multiple downstream effector proteins. Phosphorylation at Tyr490 is required for Shc association and subsequent activation of the Ras-MAP kinase-signaling cascade, which leads to activation of Elk-1-dependent gene transcription and neurite growth. Phosphorylations at Tyr674 and Tyr675 lie within the catalytic domain of TrkA tyrosine kinase and reflect Trk kinase activity. Additionally, phosphorylation at Tyr751 is required for PI3-kinase association and activation of the Akt signaling cascade.

Synonyms: NTRK1, TRK, Trk-A

Product images:



Immunohistochemistry (IHC) analyzes of Trk A antibody in paraffin-embedded human brain tissue.