

**AP09481PU-S****Polyclonal Antibody to TrkB pTyr515 - Aff - Purified****Alternate names:**

BDNF/NT-3 growth factors receptor, GP145-TrkB, NTRK2, Neurotrophic tyrosine kinase receptor type 2, TRKB, TrkB tyrosine kinase

**Quantity:**

50 µg

**Concentration:**

1.0 mg/ml

**Background:**

Neurotrophins activate tyrosine kinase receptors of the Trk family (TrkA, TrkB and TrkC) and they all share a common low affinity receptor (p75NTR or p75). Although p75NTR does not appear to directly transduce NGF signals, this receptor appears to increase the responsiveness of the trk receptors and plays a role in the retrograde transport of neurotrophin signals from axon terminals to the cell body. The expression of trk gene neurotrophin receptors in mouse is tabulated by Barbacid (1994). NGF binds with high affinity and activates the TrkA tyrosine kinase receptor, which is apparently responsible for signal transduction. BDNF activates the TrkB tyrosine kinase receptor, which it shares with NT-4. NT-3 activates the TrkC tyrosine kinase receptor, but can also activate TrkA and TrkB receptors in certain cell systems. NT-4 primarily activates the TrkB tyrosine kinase receptor, which it shares with BDNF.

**Uniprot ID:**

[Q16620](#)

**NCBI:**

[NP\\_001007098](#)

**GeneID:**

[4915](#)

**Host:**

Rabbit

**Immunogen:**

The antiserum was produced against synthesized phosphopeptide derived from Human TrkB around the phosphorylation site of Tyrosine 515 (P-Q-Y-pF-G).

**Format:**

**State:** Liquid purified Ig fraction

**Purification:** Immunoaffinity Chromatography using epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site.

**Buffer System:** PBS (without Mg<sup>2+</sup> and Ca<sup>2+</sup>), pH 7.4, 150 mM NaCl, 0.02% Sodium Azide and 50% Glycerol.

**Applications:**

Immunofluorescence: 1/100~1/200.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

**Specificity:**

Antibody AP09481PU detects endogenous levels of TrkB only when phosphorylated at Tyrosine 515.

**Species Reactivity:**

**Tested:** Human, Mouse and Rat

**Add. Information:**

Molecular Weight: 140 kDa

**Storage:**

Store the antibody (in aliquots) at -20°C.

Avoid repeated freezing and thawing.

Shelf life: One year from despatch.

**General Readings:**

1. Woronowicz A, et al. Glycobiology. 2007 Jan;17(1):10-24.
2. Mojsilovic-Petrovic J, et al. J Neurosci. 2006 Sep 6;26(36):9250-63.
3. Lewis MA, et al. Mol Pharmacol. 2006 Apr;69(4):1396-404.
4. Cai D, et al. Physiol Genomics. 2006 Feb 14;24(3):191-7.

**Pictures:**

**Figure 1.** Immunofluorescence staining of methanol-fixed HeLa cells using TRkB pTyr515 Antibody (#AP09481PU, Red).

