12170 Flint Place
Poway, CA 92064
www.prosci-inc.com

Toll Free: 888-513-9525
Tel: 858-513-2638
Fax: 858-513-2692
techsupport@prosci-inc.com

NGFR Antibody

NGFR: Nerve growth factor receptor, p75NTR, TNFRSF16

CATALOG NO.: 3593

BACKGROUND:

The tumor necrosis factor (TNF) and TNF receptor (TNFR) gene superfamilies regulate numerous biological functions including cell proliferation, differentiation, and survival through regulating the activation of the transcription factor NF-κB and various mitogen-activated protein kinases (reviewed in 1). Nerve growth factor receptor (NGFR) was one of the earliest characterized members of this family (2). Also known as the low-affinity receptor p75NTR, this receptor is involved in several diverse functions such as apoptosis, neurite outgrowth during development, and myelination (reviewed in 3). Its ligands include NGF, brain-derived neurotrophic factor (BDNF), NT3, and NT4 (4). NGFR can also associate with other NGF receptors such as Trk through the cytosolic and transmembrane domains and thus can function as a co-receptor that refines Trk affinity and specificity for neurotrophins (5). Finally, upon binding of various neurotrophins, NGFR associates with tumor necrosis factor receptor-6 (TRAF6), suggesting that it can potentially function as a signal transducer for NGF signals through NGFR (6).

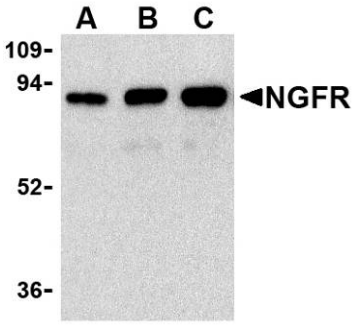
SOURCE:

Rabbit polyclonal NGFR antibody was raised against purified recombinant human NGFR (Genbank accession NP_002498).

APPLICATION:

NGFR antibody can be used for the detection of NGFR by Western blot at 1 µg/ml. (Optimal dilution should be determined by user.) A-20 cell lysate can be used as positive control. NGFR antibody is human and mouse reactive.

This product is for research use only.



Western blot analysis of (A) 25 ng, (B) 50 ng, and (C) 100 ng of purified recombinant NGFR with NGFR antibody at 1 µg/ml.

STORAGE:

NGFR antibody is supplied as immunoaffinity purified IgG in PBS containing 0.02% sodium azide. Store at 4˚C, stable for one year.

RELATED PRODUCTS:

A-20 Cell Lysate, Catalog No. **1288**.
TRAF6 Antibody (CT), Catalog No. **3129**.

REFERENCES:

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3. Gentry JJ, Barker, PA, and Carter BD. The p75 neurotrophin receptor: multiple interactors and numerous functions. *Prog. Brain Res.* 2004;146:25-39.

4. Nykjaer A, Willnow TE, and Petersen CM. p75NTR – live or let die. *Curr. Opin. Neurobio.* 2005; 15:49-57.

5. Chao MV. Neurotrophins and their receptors: a convergence point for many signalling pathways. *Nat. Rev. Neurosci.* 2003; 4:299-309.

6. Khursigara G, Orlinick JR, and Chao MN. Association of the p75 neurotrophin receptor with TRAF6. *J. Biol. Chem.* 274:2597-600.