

## **Product datasheet for TA328683**

# OriGene Technologies, Inc.

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### p75 NGF Receptor (NGFR) Rabbit Polyclonal Antibody

#### **Product data:**

**Product Type:** Primary Antibodies

**Applications:** IHC, WB

Recommended Dilution: WB: 1:200-1:2000; IHC: 1:100-1:3000

Reactivity: Human, Rat

Host: Rabbit

Clonality: Polyclonal

**Immunogen:** Peptide CKQNKQGANSRPVNQT corresponding to amino acid residues 278-293 of human

p75NTR. Intracellular, juxtamembrane domain.

Formulation: Lyophilized. Concentration before lyophilization ~0.8mg/ml (lot dependent, please refer to

CoA along with shipment for actual concentration). Buffer before lyophilization: Phosphate

buffered saline (PBS), pH 7.4, 1% BSA, 0.025% NaN3.

**Reconstitution Method:** Add 50 ul double distilled water (DDW) to the lyophilized powder.

**Purification:** Affinity purified on immobilized antigen.

Conjugation: Unconjugated

**Storage:** Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

**Gene Name:** nerve growth factor receptor

Database Link: NP 002498

Entrez Gene 24596 RatEntrez Gene 4804 Human

P08138





Background:

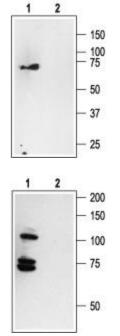
The p75NTR receptor is a member of the TNF receptor superfamily. p75NTR, like all the superfamily members is a type I transmembrane protein with tandem cysteine-rich domains in the extracellular portion and a intracellular death domain. p75NTR binds its ligands as a homodimer but can also form heterodimers with other receptors such as TrkA, TrkB, TrkC, Nogo receptor and sortilin. The precise multimeric receptor complex formed between p75NTR and the other receptors will determine the ligand being recognized (see below) and the biological response to its binding. As its name implies, p75NTR binds all the neurotrophins (NGF, BDNF, NT-3 and NT-4) with similar nM affinities. Co-expression of p75NTR with the Trk receptors enhances the ability to bind and respond to the specific neurotrophin and induces cell survival. On the other hand, it has recently been demonstrated that p75NTR binds with high affinity to the unprocessed form of NGF (proNGF) probably as a complex with sortilin and this leads to cell death by apoptosis. Finally, a multimeric complex of p75NTR and Nogo receptor binds myelin proteins such as Nogo-66, MAG and OmgP resulting in inhibition of axonal growth.

Synonyms: CD271; Gp80-LNGFR; p75(NTR); p75NTR; TNFRSF16

**Protein Families:** Druggable Genome, Transmembrane

**Protein Pathways:** Cytokine-cytokine receptor interaction, Neurotrophin signaling pathway

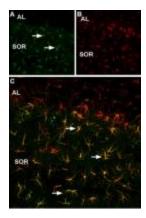
#### **Product images:**



Western blot analysis of rat brain membranes: 1. Anti-Human p75 NTR (intracellular) antibody, (1:200). 2. Anti-Human p75 NTR (intracellular) antibody, preincubated with the control peptide antigen.

Western blot analysis of human melanoma cells A875: 1. Anti-Human p75 NTR (intracellular) antibody, (1:200). 2. Anti-Human p75 NTR (intracellular) antibody, preincubated with the control peptide antigen.





Expression of p75NTR in mouse hippocampus. A. Mouse hippocampal sections (frozen) were stained with Anti-Human p75NTR-intracellular antibody (1:200). p75NTR (green) appeared in a subset of astrocytes. B. Astrocytes were visualized with Anti-glial fibrillary acidic protein (GFAP) antibody (red). C. A merge of the two images demonstrates appearance of p75NTR mainly in stratum radiatum (SOR) and only in a few astrocytes in the alveus (AL).