

Product datasheet for **TA328684**

p75 NGF Receptor (NGFR) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	WB: 1:200-1:2000; IHC: 1:100-1:3000
Reactivity:	Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide CGEQHSLVPLPQEAP, corresponding to amino acid residues 377-392 of rat Neurotensin Receptor 2. Intracellular, C-terminus.
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% NaN ₃ .
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 18053 Mouse Entrez Gene 24596 Rat P08138



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Background:

Neurotensin receptor 2 (NTS2) is one of three receptors that mediate the effects of the tridecapeptide neurotensin. Neurotensin is synthesized and secreted from neurons in the central neural system (CNS) and from endocrine cells in the gastrointestinal tract. NTS2 and NTS1 belong to the 7-transmembrane domain, G protein-coupled receptor (GPCR) superfamily while the third neurotensin receptor NTS3 (also called Sortilin) is a type I membrane protein with a large extracellular domain. Both NTS1 and NTS3 bind neurotensin with high affinity while NTS2 binds it with low affinity. NTS2 signals preferentially through Gαq, resulting in the activation phospholipase C and intracellular Ca²⁺ mobilization. However, the exact signaling mechanisms subsequent to NTS2 activation appear to depend on the species and on the cellular system in which the receptor is studied. NTS2 is expressed mainly in the central nervous system and dorsal root ganglion (DRG) neurons but has been also observed in peripheral tissues such as gastric parietal cells where it probably mediates the neurotensin-induced effects on gastric acid secretion. The most established physiological role of NTS2 is its role in pain transmission as NTS2-deficient mice showed that NTS2 is the likely mediator of the neurotensin-induced analgesic responses.

Synonyms:

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

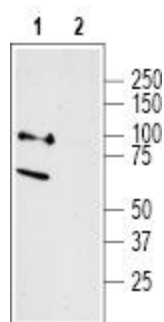
Protein Families:

Druggable Genome, Transmembrane

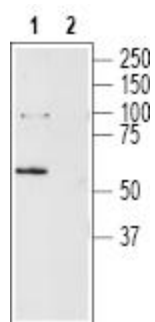
Protein Pathways:

Cytokine-cytokine receptor interaction, Neurotrophin signaling pathway

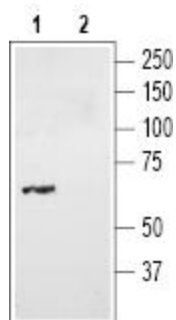
Product images:



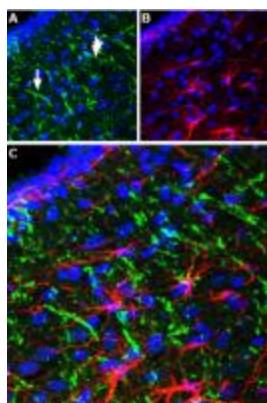
Western blot analysis of rat dorsal root ganglion lysates: 1. Anti-Neurotensin Receptor 2 antibody, (1:200). 2. Anti-Neurotensin Receptor 2 antibody, preincubated with the control peptide antigen.



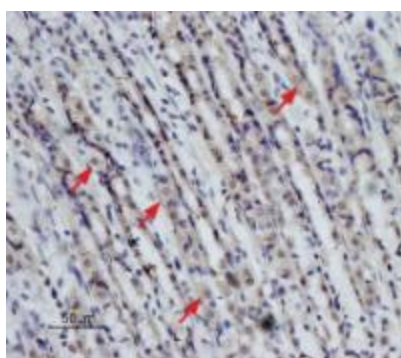
Western blot analysis of rat brain lysates: 1. Anti-Neurotensin Receptor 2 antibody, (1:200). 2. Anti-Neurotensin Receptor 2 antibody, preincubated with the control peptide antigen.



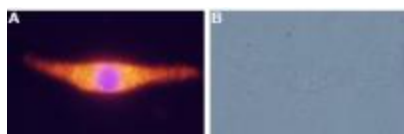
Western blot analysis of mouse brain lysates: 1. Anti-Neurotensin Receptor 2 antibody, (1:400). 2. Anti-Neurotensin Receptor 2 antibody, preincubated with the control peptide antigen.



IHC staining of perfusion-fixed brain frozen rat mediobasal (MB) hypothalamus sections using Anti-Neurotensin Receptor 2 antibody, (1:100), (green). A. Neurotensin Receptor 2 (NTS2) appears in neuronal fibers marked by white arrows. B. In the same section, there is staining for glial fibrillary acidic protein (red fluorescence), a marker of astrocytes. C. Merging the two images demonstrates that NTS2 is not localized in astrocytes. DAPI is used as the counterstain (blue).



Expression of NTR2 in rat stomach. Immunohistochemical staining of paraffin-embedded rat stomach sections using Anti-Neurotensin Receptor 2 antibody, (1:50), (brown). Staining is specific for parietal cells (arrows) of the gastric glands. Hematoxylin is used as the counterstain.



Expression of NTR2 in rat C6 glioma cells. Immunocytochemical staining of rat C6 glioma cells. A. Paraformaldehyde fixed and permeabilized rat C6 glioma cells were stained with Anti-Neurotensin Receptor 2 antibody, (1:200), followed by Alexa-555 conjugated goat-anti-rabbit- secondary antibody (orange staining). Nuclei were visualized with the cell permeable dye Hoechst 33342 (blue staining). B. Live view of the same field as in (A).