

Product datasheet for **TA328681**

Neurotrophin 3 (NTF3) 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:	Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide (C)DTELLRQRRYNSPR, corresponding to amino acid residues 89-103 of human NT-3 (precursor).Pro domain of the NT-3 protein.
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:	neurotrophin 3
Database Link:	NP_002518 Entrez Gene 18205 Mouse Entrez Gene 81737 Rat P20783



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Background:

Brain derived neurotrophic factor (BDNF) is a member of the neurotrophin family of growth factors that includes nerve growth factor (NGF) neurotrophin-3 (NT-3) and neurotrophin-4/5 (NT-4/5). All neurotrophins are synthesized as proneurotrophin precursors that are subsequently processed within the intracellular transport pathway to yield proneurotrophins that are further processed to generate the mature form. The mature form of BDNF is a non-covalent stable homodimer that can be secreted in both constitutive and regulated pathways. Until recently, the functional role of the neurotrophins prodomains was thought to include assistance in the correct folding of the mature protein and the sorting of the neurotrophins into the constitutive or regulated secretory pathway. However, a growing body of evidence suggests that the uncleaved proneurotrophin precursors can be secreted from cells and that they may mediate different biological functions. Several studies implicate both proNGF and proBDNF in several physiological and pathological conditions. Today it remains to be established whether proNT-3 has similarly, different biological functions than the mature NT-3 neurotrophin.

Synonyms:

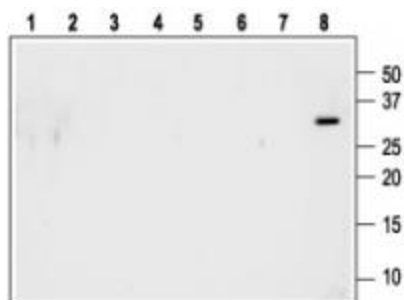
HDNF; NGF-2; NGF2; NT-3; NT3

Protein Families:

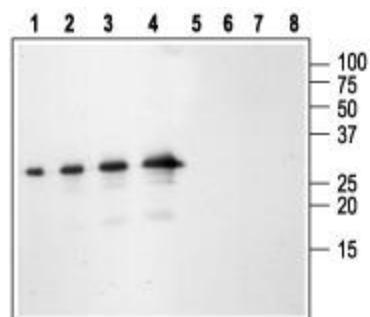
Druggable Genome, Secreted Protein

Protein Pathways:

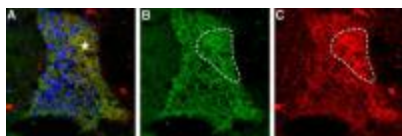
MAPK signaling pathway, Neurotrophin signaling pathway

Product images:


Western blot analysis using Anti-proNT-3 antibody (1:600): 1. hNT-3, (200 ng). 2. hNT-4, (200 ng). 3. mNGF 2.5S (Grade II), (200 ng). 4. h β -NGF, (200 ng). 5. hBDNF, (200 ng). 6. proNGF (WT-mouse), (200 ng). 7. proBDNF (WT-mouse), (200 ng). 8. recombinant proNT-3 10 ng.



Western blot analysis of mouse recombinant proNT-3: 1, 5. 10 ng proNT-3. 2, 6. 50 ng proNT-3. 3, 7. 100 ng proNT-3. 4, 8. 200 ng proNT-3. Lanes 1-4 Anti-proNT-3 antibody, (1:300). Lanes 5-8 Anti-proNT-3 antibody, preincubated with the control peptide antigen.



IHC staining of rat Islands of Calleja (IOC) using Anti-proNT-3 antibody. A. proNT-3 staining (green) overlaps neuronal nitric oxide synthase (nNOS red) while a cluster of cells covers a part of the island (DAPI blue counterstain) but not a cell-poor area (star). B. The distribution of proNT-3 is shown alone. Note that staining is more intense in the cell poor area demarcated by white line. C. The distribution of neuronal NOS is most intense in the cell-poor region.