

## Product datasheet for **TA328680**

### 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:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide GEIKTGNSPV(C), <sup>Å</sup> corresponding to amino acid residues 39-48 of mature human NT-3 <sup>Å</sup> (residues 177-186 of the NT-3 precursor).
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, 0.05% NaN <sub>3</sub> .
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:	<a href="#">NP_002518</a> <a href="#">Entrez Gene 18205 Mouse</a> <a href="#">Entrez Gene 81737 Rat</a> <a href="#">Entrez Gene 4908 Human</a> <a href="#">P20783</a>



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**Background:**

The neurotrophins ("neuro" means nerve and "trophe" means nutrient) are a family of soluble, basic growth factors which regulate neuronal development, maintenance, survival and death in the CNS and the PNS. The structural hallmark of all the neurotrophins is the characteristic arrangement of the disulfide bridges known as the cysteine knot, which has been found in other growth factors such as PDGF. The rat and human forms of Neurotrophin-3 (NT-3) are 96% homologous. NT-3 has been shown to strengthen synaptic connections to motoneurons in the neonatal rat, to serve as an anti-inflammatory factor, to suppress microglial activation, to play a critical role in regulating T helper 1/T helper 2 cell balance and to modify potassium currents in isolated inner hair cells from guinea pig cochlea. The biological effects of NT-3 are mediated by two receptors: TrkC, which is specific for NT-3, and p75NTR, which binds all the neurotrophins.

**Synonyms:**

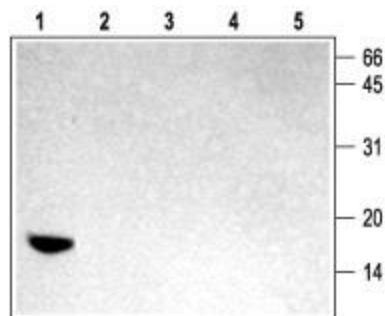
HDNF; NGF-2; NGF2; NT-3; NT3

**Protein Families:**

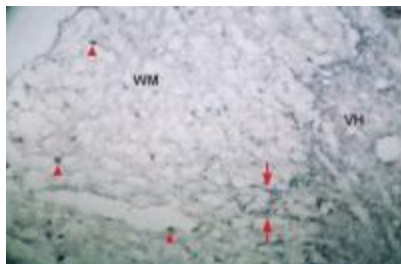
Druggable Genome, Secreted Protein

**Protein Pathways:**

MAPK signaling pathway, Neurotrophin signaling pathway

**Product images:**


Western blot analysis using Anti-NT-3 antibody (1:1000) (1-4) or anti-NT-3 antibody, preincubated with the control antigen peptide (5): 1. hNT-3, 10 ng 2. h $\beta$ -NGF, 100 ng 3. hNT-4, 100 ng 4. hNT-3, 10 ng 5. Control peptide



Expression of NT-3 in mouse spinal cord. Immunohistochemical staining of mouse spinal cord using Anti-NT-3 antibody. The spinal ventral horn was stained diffusely with some extensions (arrows) into the white matter (WM). In the WM there were NT-3 immunoreactive cells that were probably glia (triangles).