

The neurotrophin-3 and p75NTR symmetrical

Human, NTF3 with TNFR

Expressed in *E.Coli*

Cat. No. CBCRY18

Lot. No. (See product label)

BACKGROUND

Neurotrophins (NTs) are important regulators for the survival, differentiation and maintenance of different peripheral and central neurons. NTs bind to two distinct classes of glycosylated receptor: the p75 neurotrophin receptor (p75(NTR)) and tyrosine kinase receptors (Trks). Whereas p75(NTR) binds to all NTs, the Trk subtypes are specific for each NT.

MOLECULAR DESCRIPTION

Protein classification: signaling protein

Structure Weight: 63861.22

Polymer: 1

Molecule: Neurotrophin-3

Chains: A, B

Type: polypeptide (L)

Chain Length: 119 amino acids

Polymer: 2

Molecule: Tumor necrosis factor receptor superfamily member 16

Chains: C, D

Type: polypeptide (L)

Chain Length: 167 amino acids

CRYSTAL INFORMATION

PDB ID: [3BUK](#)

MMDB ID: [65479](#)

Source: E.Coli

Method: X-Ray Diffraction

Resolution: 2.6 Å

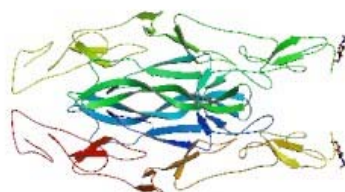
Ligand Chemical Component: N-Acetyl-D-Glucosamine

Related PDB Entries

[1NT3](#) : The same protein complexed with p75

FOR RESEARCH USE ONLY

CRYSTAL STRUCTURE



GENE INFORMATION

Gene Name: [NTF3](#)

Synonyms: HDNF; MGC129711; NGF-2; NGF2; NT3; Nerve growth factor 2; neurotrophic factor; neurotrophin 3; Neurotrophin-3

UniProt ID: [P20783](#)

GeneID: [4908](#)

Chromosome Location: 12p13

Function: growth factor activity; nerve growth factor binding; neurotrophin receptor binding

Gene Name: [NGFR](#)

Synonyms: CD271; Gp80-LNGFR; TNFRSF16; p75(NTR); p75NTR; low affinity nerve growth factor receptor; low-affinity nerve growth factor receptor; nerve growth factor receptor; CD271 antigen; NGF receptor; nerve growth factor receptor

UniProt ID: [P08138](#)

GeneID: [4804](#)

Chromosome Location: 17q21-q22

Function: death receptor activity; nerve growth factor binding; protein binding

PRIMARY CITATION

Gong, Y., Cao, P., Yu, H.J., Jiang, T. (2008) Crystal structure of the neurotrophin-3 and p75NTR symmetrical complex. Nature 454: 789-793

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