

# PRODUCT DATA SHEET

**COMPLEX**

Complex Biotech Co., Ltd

## CD271 Recombinant Protein

Catalog: BCP3516

Host: E.coli

Tag: His-tag

His-tag

### BackGround:

The p75 neurotrophin receptor (p75NTR), a member of the TNF receptor superfamily, is distinguished by multiple cysteine-rich ligand-binding domains, a single transmembrane sequence and a noncatalytic cytoplasmic domain. p75NTR displays paradoxical functions when acting alone or with other receptor proteins. Working in concert with Trk receptors, p75NTR recognizes neurotrophins and transmits trophic signals into the cell. Both p75NTR and TrkA are required to activate PI3K-Akt signaling, while TrkA can individually activate the MAP kinase pathway. In contrast, p75NTR, possibly through JNK, ensures appropriate apoptosis of injured neurons and improperly targeted neonatal neurons.

The p75NTR protein undergoes sequential cleavage similar to APP and Notch. First,  $\alpha$ -secretase removes the p75NTR ectodomain, eliminating ligand-mediated signaling. At this point, the membrane-tethered cleavage product can still fine-tune Trk-mediated trophic actions.  $\gamma$ -secretase cleaves within the transmembrane domain to liberate the cytoplasmic tail from its membrane anchor and allow the p75NTR intracellular domain to translocate to the nucleus.

### Product:

PBS, 4M Urea, PH7.4

### Molecular Weight:

~24kDa

### Swiss-Prot:

P08138

### Purification&Purity:

Transferred into competent cells and the supernatant was purified by NI column affinity chromatography and the purity is > 85% (by SDS-PAGE).

### Restriction Sites:

NdeI-XhoI

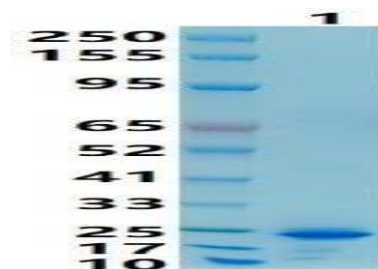
### Storage&Stability:

Store at 4 °C short term. Aliquot and store at -20 °C long term. Avoid freeze-thaw cycles.

### Expression Vector:

pet-22b(+)

### DATA:



### Note:

For research use only, not for use in diagnostic procedure.