

Rev03
Update: Dec,14,2021

DATASHEET

NT-4, Human

Cat. No.: Z03000

Product Introduction

Species	Human
Protein Construction	Expressed with an N-terminal Met. NT-4 (Gly81-Ala210) Accession # P34130
Purity	> 95% as analyzed by SDS-PAGE > 95% as analyzed by HPLC
Endotoxin Level	< 0.3 EU/μg of protein by gel clotting method
Biological Activity	ED ₅₀ < 5.0 μg/ml, measured by a cell proliferation assay using C6 cells, corresponding to a specific activity of > 2.0 × 10 ² units/mg.
Expression System	E. coli
Theoretical Molecular Weight	28.1 kDa, a noncovalently linked homodimer of two 14.0 kDa polypeptide monomers.
Formulation	Lyophilized after extensive dialysis against 50 mM acetic acid.
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in 50 mM acetic acid or ddH ₂ O up to 50 μg/ml.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

Background

Target Background : Neurotrophin-4 (NT-4), also known as NT-5, is a neurotrophic factor structurally related to β-NGF, BDNF, and NT-3. Human NT-4 shares 48 - 52% aa sequence identity with human β-NGF, BDNF, and NT-3. Neurotrophins have six conserved cysteine residues that are involved in the formation of three disulfide bonds. NT-4 is expressed highest levels in prostate, lower levels in thymus, placenta, and skeletal muscle. NT-4 binds and induces receptor dimerization and activation of TrkB. NT-4 can signal through TrkB receptors and promotes the survival of peripheral sensory sympathetic neurons.

Synonyms : Neurotrophin-4; NTF4; GLC10; GLC10; NT-4; NT-4/5; NT-5; NT4; NT5; NTF5; neurotrophin 4

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.