

Rev03  
Update: Dec,14,2021

## DATASHEET

# NT-4, Mouse

Cat. No.: Z03180

## Product Introduction

<b>Species</b>	Mouse
<b>Protein Construction</b>	Expressed with an N-terminal Met. <b>NT-4 (Gly80-Ala209) Accession # Q80VU4</b>
<b>Purity</b>	> 95% as analyzed by SDS-PAGE
<b>Endotoxin Level</b>	< 0.2 EU/μg of protein by gel clotting method
<b>Biological Activity</b>	ED <sub>50</sub> < 1.0 μg/ml, measured by a cell proliferation assay using C6 cells, corresponding to a specific activity of > 1.0 × 10 <sup>3</sup> units/mg.
<b>Expression System</b>	E. coli
<b>Apparent Molecular Weight</b>	~14.0 kDa, on SDS-PAGE under reducing conditions.
<b>Formulation</b>	Lyophilized after extensive dialysis against 50 mM acetic acid.
<b>Reconstitution</b>	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 <sub>2</sub> O up to 100 μg/ml.
<b>Storage &amp; Stability</b>	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.