

Human NT-3 Protein, premium grade

Catalog # NT3-H5215



Synonyms

HDNF, Nerve growth factor 2, NGF-2, Neurotrophic factor, NTF3, NT3.Neurotrophin3

Source

Human NT-3 Protein, premium grade (NT3-H5215) is expressed from human 293 cells (HEK293). It contains AA Tyr 139 - Thr 257 (Accession # [P20783](#)).

Predicted N-terminus: Tyr 139

It is produced under our rigorous quality control system that incorporates a comprehensive set of tests including sterility and endotoxin tests. Product performance is carefully validated and tested for compatibility for cell culture use or any other applications in the early preclinical stage. When ready to transition into later clinical phases, we also offer a custom GMP protein service that tailors to your needs. We will work with you to customize and develop a GMP-grade product in accordance with your requests that also meets the requirements for raw and ancillary materials use in cell manufacturing of cell-based therapies.

Molecular Characterization

NT-3(Tyr 139 - Thr 257)
P20783

This protein carries no "tag".

The protein has a calculated MW of 13.6 kDa. The protein migrates as 14 kDa $\pm$ 3 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 0.01 EU per μ g by the LAL method / rFC method.

Host Cell DNA

<0.02 ng/ μ g of protein tested by qPCR.

Sterility

Negative

Mycoplasma

Negative

Purity

>95% as determined by SDS-PAGE.

>95% as determined by SEC-HPLC.

Formulation

Lyophilized from 0.22 μ m filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Shipping and Storage

This product is shipped at ambient temperature.

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

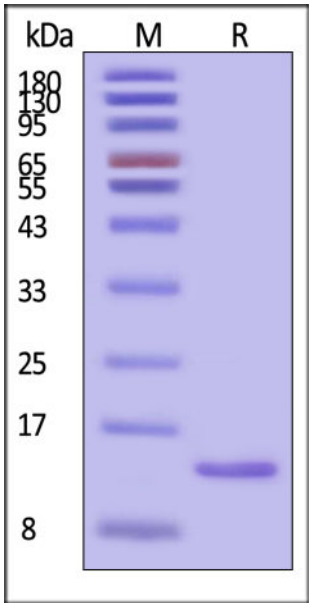
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

ACRO Quality Management System

- QMS(ISO, GMP).

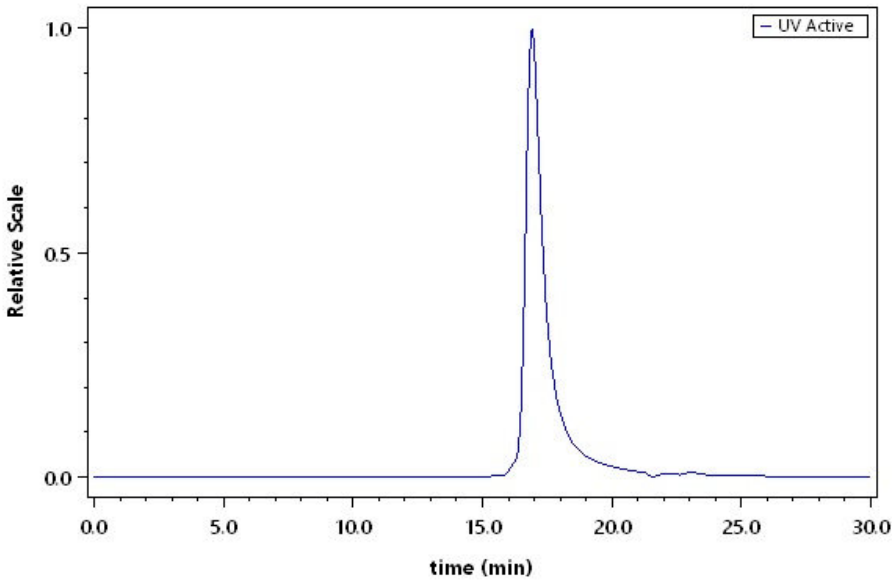
- [Quality Advantages](#)
- [Quality Control Process](#)

SDS-PAGE



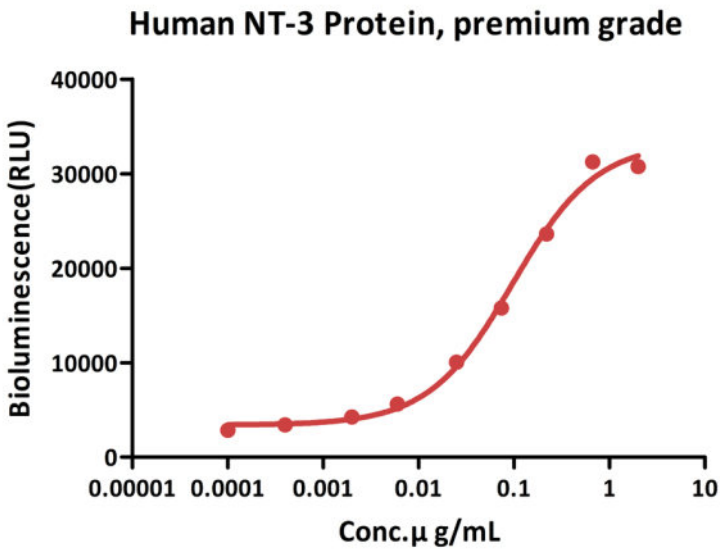
Human NT-3 Protein, premium grade on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With [Star Ribbon Pre-stained Protein Marker](#)).

SEC-HPLC



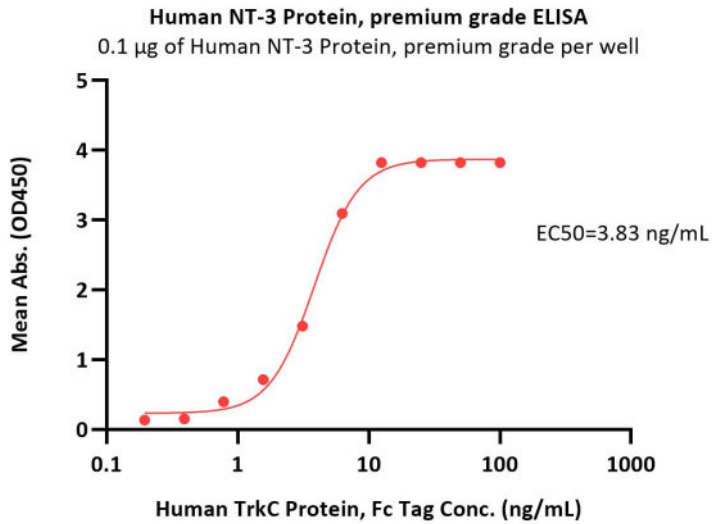
The purity of Human NT-3 Protein, premium grade (Cat. No. NT3-H5215) was greater than 95% as determined by SEC-HPLC.

Bioactivity-CELL BASE



Human NT-3 Protein, premium grade (Cat. No. NT3-H5215) induced Human TrkB (Luc) HEK293 Reporter Cell-1. The EC50 for this effect is 0.095 µg/mL (Routinely tested).

Bioactivity-ELISA



Immobilized Human NT-3 Protein, premium grade (Cat. No. NT3-H5215) at 1 µg/mL (100 µL/well) can bind Human TrkC Protein, Fc Tag (Cat. No. TRC-H5256) with a linear range of 0.2-6 ng/mL (QC tested).

Background

Neurotrophin-3 (NT-3), encoded by the NTF3 gene, is a member of the NGF family of neurotrophic factors (also named neurotrophins). The neurotrophin family is comprised of at least four proteins including NGF, BDNF, NT-3, and NT-4/5. These secreted cytokines are synthesized as prepropeptides that are proteolytically processed to generate the mature proteins. Their functions including supporting the survival and differentiation of existing neurons, encouraging the growth and differentiation of new neurons and synapses, are required in both the central and the peripheral nervous systems. NT-4 signals predominantly through the TrkB receptor tyrosine kinase. NTF3-deficient mice generated by gene targeting display severe movement defects of the limbs. The mature peptide of this protein is identical in all mammals examined including human, pig, rat and mouse.



www.acrobiosystems.com