

### Synonym

neurotrophic factor 4,neurotrophic factor 5,neurotrophin 4,neurotrophin 5,neurotrophin-5,NT4,NT-4,5,NT-5,NTF4,NTF5,GLC10

#### Source

Human NT-4, Tag Free(NT4-H5114) is expressed from E. coli cells. It contains AA Gly 81 - Ala 210 (Accession # P34130-1).

Predicted N-terminus: Met

## **Molecular Characterization**

NT-4(Gly 81 - Ala 210) P34130-1

This protein carries no "tag"

The protein has a calculated MW of 14.1 kDa. The protein migrates as 15 kDa under reducing (R) condition (SDS-PAGE).

#### **Endotoxin**

Less than 0.01 EU per µg by the LAL method.

## **Purity**

>95% as determined by SDS-PAGE.

>95% as determined by SEC-MALS.

#### **Formulation**

Lyophilized from 0.22  $\mu m$  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.

## **Storage**

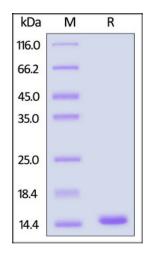
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

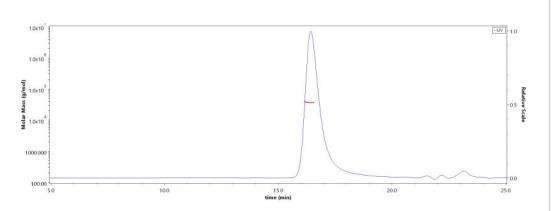
# SDS-PAGE



Human NT-4, Tag Free on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

# **Bioactivity-ELISA**

## **SEC-MALS**



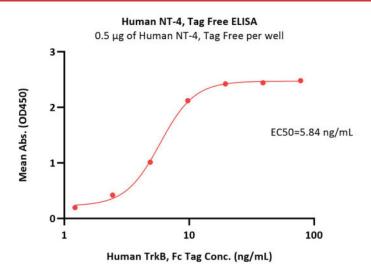
The purity of Human NT-4, Tag Free (Cat. No. NT4-H5114) is more than 95% and the molecular weight of this protein is around 32-40 kDa verified by SEC-MALS.

Report

# Human NT-4 / Neurotrophin-4 Protein, Tag Free, low endotoxin (MALS verified)







Immobilized Human NT-4, Tag Free (Cat. No. NT4-H5114) at 5  $\mu$ g/mL (100  $\mu$ L/well) can bind Human TrkB, Fc Tag (Cat. No. NT2-H5254) with a linear range of 2-10 ng/mL (QC tested).

# Background

Neurotrophin-4 (NT-4), also known as NT-5, is a member of the NGF family of neuronal and epithelial growth factors. 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 prepropertides 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.

# **Clinical and Translational Updates**

Please contact us via <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.