

# Human NTS1 Protein

Cat. No. NTS-HM201

## Description

<b>Source</b>	Recombinant Human NTS1 Protein is expressed from HEK293 with hFc tag at the C-Terminus. It contains Ser24-Leu163.
<b>Accession</b>	P30990
<b>Molecular Weight</b>	The protein has a predicted MW of 42.9 kDa. Due to glycosylation, the protein migrates to 48-53 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 0.1 EU per $\mu\text{g}$ by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

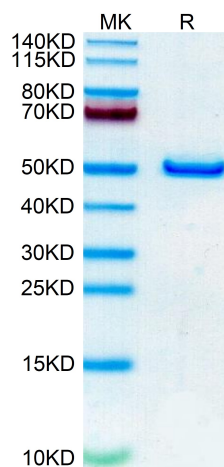
<b>Formulation</b>	Lyophilized from 0.22 $\mu\text{m}$ filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

Neurotensin (NT) is an endogenous 13 amino acid neuropeptide with profound opioid-independent analgesic effects. This role of NT is thought to be mediated by both neurotensin receptor subtype 1 (NTS1) and neurotensin receptor subtype 2 (NTS2). NT and its receptors are widely distributed in the pain circuits in central nervous system.

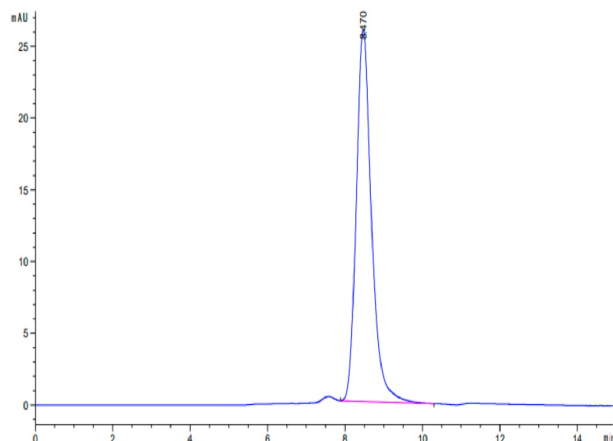
## Assay Data

### Bis-Tris PAGE



Human NTS1 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC



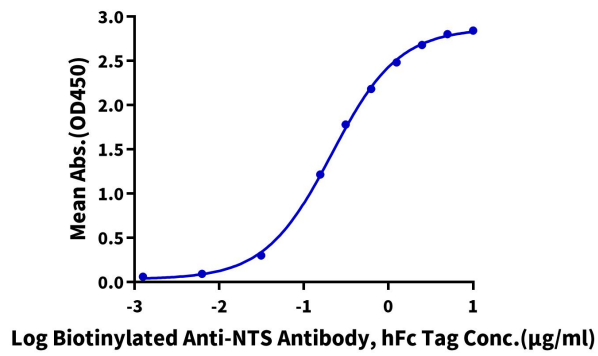
The purity of Human NTS1 is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

**Human NTS1, hFc Tag ELISA**

0.5µg Human NTS1, hFc Tag Per Well



Immobilized Human NTS1, hFc Tag at 5µg/ml (100µl/well) on the plate. Dose response curve for Biotinylated Anti-NTS Antibody, hFc Tag with the EC50 of 0.21µg/ml determined by ELISA.