

## Product datasheet for **TP300386**

### Neuraminidase (NEU1) (NM\_000434) Human Recombinant Protein

#### Product data:

**Product Type:** Recombinant Proteins

**Description:** Recombinant protein of human sialidase 1 (lysosomal sialidase) (NEU1), 20 µg

**Species:** Human

**Expression Host:** HEK293T

**Expression cDNA Clone  
or AA Sequence:** >RC200386 protein sequence  
**Red**=Cloning site **Green**=Tags(s)

MTGERPSTALPDRRWGPRILGFWGGCRVWVFAAIFLLLSLAASWSKAENDFGLVQPLVTMEQLLWVSGRQ  
IGSVDTFRILITATPRGTL LAF AEARKMSSSDEGAKFIALRRSMDQGSTWSPTAFIVNDGDVDPDGLNLG  
AVVSDVETGVVFLFYSLCAHKAGCQVASTMLVWSKDDGVSWSWTPRNLSLDIGTEVFAPGPGSGIQKQREP  
RKGRLIVCGHGT LERDGVFCLLSDDHGASWRYGSGVSGIPYGQPKQENDFNPDECQPYELPDGSSVINAR  
NQNNYHCHCRIVLRSYDACD TLRPRDVTFDPELVDPVVAAGAVVTSSGIVFFSNPAHPEFRVNLTLRWSF  
SNGTSWRKETVQLWPGPSGYSSLATLEGSMDGEEQAPQLYVLYEKGRNHYTESISVAKISVYGTL

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

**Tag:** C-Myc/DDK

**Predicted MW:** 40.2 kDa

**Concentration:** >0.05 µg/µL as determined by microplate BCA method

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

**Bioactivity:** Cell treatment (PMID: [29118338](https://pubmed.ncbi.nlm.nih.gov/29118338/))

**Preparation:** Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.

**Note:** For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.

**Storage:** Store at -80°C.

**Stability:** Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.

**RefSeq:** [NP\\_000425](https://ncbi.nlm.nih.gov/nuccore/NP_000425)



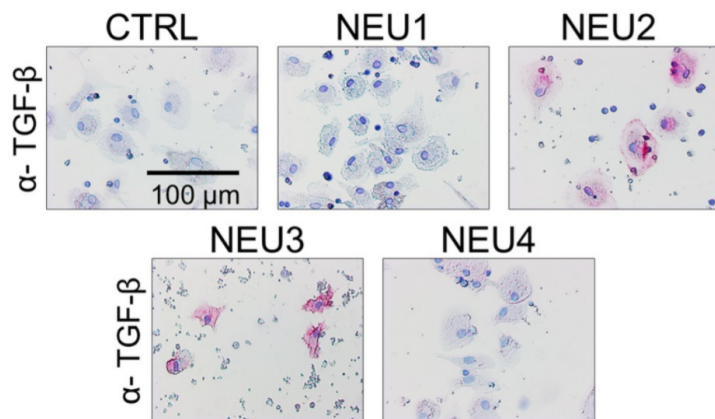
[View online »](#)

**Locus ID:** 4758  
**UniProt ID:** [Q99519](#), [Q5IQI0](#)  
**RefSeq Size:** 2088  
**Cytogenetics:** 6p21.33  
**RefSeq ORF:** 1245  
**Synonyms:** NANH; NEU; SIAL1

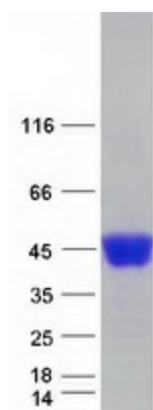
**Summary:** The protein encoded by this gene is a lysosomal enzyme that cleaves terminal sialic acid residues from substrates such as glycoproteins and glycolipids. In the lysosome, this enzyme is part of a heterotrimeric complex together with beta-galactosidase and cathepsin A (the latter is also referred to as 'protective protein'). Mutations in this gene can lead to sialidosis, a lysosomal storage disease that can be type 1 (cherry red spot-myoclonus syndrome or normosomatic type), which is late-onset, or type 2 (the dysmorphic type), which occurs at an earlier age with increased severity. [provided by RefSeq, Jul 2008]

**Protein Families:** Druggable Genome, Transmembrane  
**Protein Pathways:** Lysosome, Other glycan degradation, Sphingolipid metabolism

**Product images:**



NEU2 and NEU3 upregulate TGF-beta1 by PBMC. Human PBMC were incubated with or without recombinant human sialidases, NEU1 (OriGene TP300386), NEU2 (OriGene [TP319858]), NEU3 (OriGene [TP316537]), NEU4 (OriGene [TP303948]) for five days, then air-dried and stained for TGF-beta1. Positive staining appears pink, and counterstaining is blue. Bar is 0.1 mm. Figure cited from Sci Rep, PMID: 29118338



Coomassie blue staining of purified NEU1 protein (Cat# TP300386). The protein was produced from HEK293T cells transfected with NEU1 cDNA clone (Cat# [RC200386]) using MegaTran 2.0 (Cat# [TT210002]).