

# Product information



## NEU1, 48-415aa

Human, His-tagged, Recombinant, *E.coli*

Cat. No. IBATGP1685

**Full name:** Sialidase 1 (lysosomal sialidase)

**NCBI Accession No.:** NP\_000425

**Synonyms:** NANH, NEU, SIAL1

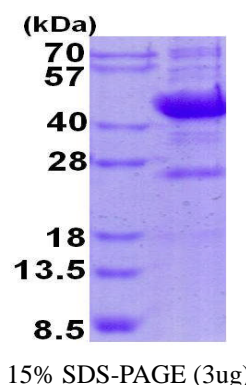
**Description:** NEU1 is a lysosomal enzyme that cleaves terminal sialic acid residues from substrates such as glycoproteins and glycolipids. In the lysosome, this enzyme is part of a heterotrimeric complex together with beta-galactosidase and cathepsin A. Mutations in this gene can lead to sialidosis, a lysosomal storage disease that can be type 1 (cherry red -myoclonus syndrome or normosomatic type), which is late-onset, or type 2 (the dysmorphic type), which occurs at an earlier age with increased severity. Recombinant human NEU1 protein, fused to His-tag at N-terminus, was expressed in *E.coli* and purified by using conventional chromatography techniques.

**Form:** Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 0.15M NaCl,  
10% glycerol, 1mM DTT

**Molecular Weight:** 42.9 kDa (393aa), confirmed by MALDI-TOF

**Purity:** > 85% by SDS - PAGE

**Concentration:** 0.25 mg/ml (determined by Bradford assay)



### Sequences of amino acids:

MGSSHHHHH SSGLVPRGSH MGSHEMDFG LVQPLVTMEQ LLWVSGRQIG SVDTFRIPLI TATPRGTLA FAEARKMSSS DEGAKFIALR  
RSMDQGSTWS PTAFIVNDGD VPDGLNLGAV VSDVETGVVF LFYSLCAHKA GCQVASTMLV WSKDDGVSWS TPRNLSLDIG TEVFAPGPGS  
GIQKQREPRK GRLIVCGHGT LERDGVFCLL SDDHGASWRY GSGVSGIPYG QPKQENDFNP DECQPYELPD GSVVINARNQ NNYHCHCRIV  
LRSYDACDTL RPRDVTFDPE LVDPVVAAGA VVTSSGIVFF SNPAHPEFRV NLTLRWSFSN GTSWRKETVQ LWPGPSGYSS LATLEGSMDG  
EEQAPQLYVL YEKGRNHYTE SISVAKISVY GTL

### General references:

Abdulkhalek, S., et al. (2011) *J. Biol. Chem.* 286 (42), 36532-36549

**Storage:** Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C.  
Avoid repeated freezing and thawing cycles.

For research use only. This product is not intended or approved for human, diagnostics or veterinary use.



Manufactured for:

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