



NEU1 peptide (DAG-P0970)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description	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]
Specificity	Highly expressed in pancreas, followed by skeletal muscle, kidney, placenta, heart, lung and liver. Weakly expressed in brain.
Purity	70 - 90% by HPLC.
Conjugate	Unconjugated
Sequence Similarities	Belongs to the glycosyl hydrolase 33 family. Contains 4 BNR repeats.
Preservative	None
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

GENE INFORMATION

Gene Name	NEU1 sialidase 1 (lysosomal sialidase) [Homo sapiens (human)]
Official Symbol	NEU1
Synonyms	NEU1; sialidase 1 (lysosomal sialidase); NEU; NANH; SIAL1; sialidase-1; G9 sialidase; exo-alpha-sialidase; lysosomal sialidase; acetylneuraminyl hydrolase; N-acetyl-alpha-neuraminidase 1;

Entrez Gene ID	4758
mRNA Refseq	NM_000434.3
Protein Refseq	NP_000425.1
UniProt ID	Q5JQI0
Chromosome Location	6p21.3
Pathway	Glycosphingolipid metabolism, organism-specific biosystem; Lysosome, organism-specific biosystem; Lysosome, conserved biosystem; Metabolism, organism-specific biosystem; Metabolism of lipids and lipoproteins, organism-specific biosystem; Other glycan degradation, organism-specific biosystem; Other glycan degradation, conserved biosystem; Sphingolipid metabolism, organism-specific biosystem; Sphingolipid metabolism, organism-specific biosystem; Sphingolipid metabolism, conserved biosystem;
Function	exo-alpha-(2->3)-sialidase activity; exo-alpha-(2->6)-sialidase activity; exo-alpha-(2->8)-sialidase activity; exo-alpha-sialidase activity;