

NEU1 Blocking Peptide (Center) Synthetic peptide Catalog # BP20027c

Specification

NEU1 Blocking Peptide (Center) - Product Information

Primary Accession Other Accession <u>099519</u> <u>A6BMK7, NP 000425.1</u>

NEU1 Blocking Peptide (Center) - Additional Information

Gene ID 4758

Other Names Sialidase-1, Acetylneuraminyl hydrolase, G9 sialidase, Lysosomal sialidase, N-acetyl-alpha-neuraminidase 1, NEU1, NANH

Target/Specificity The synthetic peptide sequence is selected from aa 203-214 of HUMAN NEU1

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

NEU1 Blocking Peptide (Center) - Protein Information

Name NEU1

Synonyms NANH

Function

Catalyzes the removal of sialic acid (N-acetylneuraminic acid) moieties from glycoproteins and glycolipids. To be active, it is strictly dependent on its presence in the multienzyme complex. Appears to have a preference for alpha 2-3 and alpha 2-6 sialyl linkage.

Cellular Location

Lysosome membrane; Peripheral membrane protein; Lumenal side. Lysosome lumen. Cell membrane. Cytoplasmic vesicle Lysosome. Note=Localized not only on the inner side of the lysosomal membrane and in the lysosomal lumen, but also on the plasma membrane and in intracellular vesicles

Tissue Location



Highly expressed in pancreas, followed by skeletal muscle, kidney, placenta, heart, lung and liver. Weakly expressed in brain.

NEU1 Blocking Peptide (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

<u>Blocking Peptides</u>

NEU1 Blocking Peptide (Center) - Images

NEU1 Blocking Peptide (Center) - Background

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.

NEU1 Blocking Peptide (Center) - References

Caciotti, A., et al. J. Neurol. 256(11):1911-1915(2009) Bonten, E.J., et al. J. Biol. Chem. 284(41):28430-28441(2009) Barcellos, L.F., et al. PLoS Genet. 5 (10), E1000696 (2009) : Wang, J., et al. J. Neurochem. 111(2):547-554(2009) Lai, S.C., et al. Eur. J. Neurol. 16(8):912-919(2009)