

#### HEXA Antibody (N-term) Blocking Peptide Synthetic peptide

Catalog # BP6942a

## Specification

# HEXA Antibody (N-term) Blocking Peptide - Product Information

Primary Accession

<u>P06865</u>

## HEXA Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 3073

#### **Other Names**

Beta-hexosaminidase subunit alpha, Beta-N-acetylhexosaminidase subunit alpha, Hexosaminidase subunit A, N-acetyl-beta-glucosaminidase subunit alpha, HEXA

#### Target/Specificity

The synthetic peptide sequence used to generate the antibody <a href=/products/AP6942a>AP6942a</a> was selected from the N-term region of human HEXA. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

## HEXA Antibody (N-term) Blocking Peptide - Protein Information

Name HEXA (HGNC:4878)

### Function

Hydrolyzes the non-reducing end N-acetyl-D-hexosamine and/or sulfated N-acetyl-D-hexosamine of glycoconjugates, such as the oligosaccharide moieties from proteins and neutral glycolipids, or from certain mucopolysaccharides (PubMed:<a href="http://www.uniprot.org/citations/11707436" target="\_blank">11707436</a>, PubMed:<a href="http://www.uniprot.org/citations/9694901" target="\_blank">9694901</a>, PubMed:<a href="http://www.uniprot.org/citations/8672428" target="\_blank">8672428</a>, PubMed:<a href="http://www.uniprot.org/citations/8672428" target="\_blank">8672428</a>, PubMed:<a href="http://www.uniprot.org/citations/8123671" target="\_blank">8123671</a>). The isozyme S is as active as the isozyme A on the anionic bis-sulfated glycans, the chondroitin-6- sulfate trisaccharide (C6S-3), and the dermatan sulfate pentasaccharide, and the sulfated glycosphingolipid SM2 (PubMed:<a href="\_blank">11707436</a>). The isozyme

B does not hydrolyze each of these substrates, however hydrolyzes efficiently neutral



oligosaccharide (PubMed:<a href="http://www.uniprot.org/citations/11707436" target="\_blank">11707436</a>). Only the isozyme A is responsible for the degradation of GM2 gangliosides in the presence of GM2A (PubMed:<a href="http://www.uniprot.org/citations/9694901" target="\_blank">9694901</a>, PubMed:<a href="http://www.uniprot.org/citations/8672428" target="\_blank">8672428</a>, PubMed:<a href="http://www.uniprot.org/citations/8672428" target="\_blank">8672428</a>, PubMed:<a href="http://www.uniprot.org/citations/8672428" target="\_blank">8672428</a>, PubMed:<a

Cellular Location Lysosome.

## HEXA Antibody (N-term) Blocking Peptide - Protocols

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

Blocking Peptides

### HEXA Antibody (N-term) Blocking Peptide - Images

### HEXA Antibody (N-term) Blocking Peptide - Background

HEXA is the alpha subunit of the lysosomal enzyme beta-hexosaminidase that, together with the cofactor GM2 activator protein, catalyzes the degradation of the ganglioside GM2, and other molecules containing terminal N-acetyl hexosamines. Beta-hexosaminidase is composed of two subunits, alpha and beta, which are encoded by separate genes. Both beta-hexosaminidase alpha and beta subunits are members of family 20 of glycosyl hydrolases.

#### HEXA Antibody (N-term) Blocking Peptide - References

Park, N.J., et.al., Pediatr. Res. (2009)Pennybacker, M., et.al., J. Biol. Chem. 271 (29), 17377-17382 (1996)