

NGLY1 Antibody (Center) Blocking Peptide

Synthetic peptide Catalog # BP6689c

Specification

NGLY1 Antibody (Center) Blocking Peptide - Product Information

Primary Accession

096IV0

NGLY1 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 55768

Other Names

Peptide-N(4)-(N-acetyl-beta-glucosaminyl)asparagine amidase, PNGase, hPNGase, N-glycanase 1, Peptide:N-glycanase, NGLY1, PNG1

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP6689c was selected from the Center region of human NGLY1. 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.

NGLY1 Antibody (Center) Blocking Peptide - Protein Information

Name NGLY1

Synonyms PNG1

Function

Specifically deglycosylates the denatured form of N-linked glycoproteins in the cytoplasm and assists their proteasome-mediated degradation. Cleaves the beta-aspartyl-glucosamine (GlcNAc) of the glycan and the amide side chain of Asn, converting Asn to Asp. Prefers proteins containing high-mannose over those bearing complex type oligosaccharides. Can recognize misfolded proteins in the endoplasmic reticulum that are exported to the cytosol to be destroyed and deglycosylate them, while it has no activity toward native proteins. Deglycosylation is a prerequisite for subsequent proteasome-mediated degradation of some, but not all, misfolded glycoproteins.



Cellular Location Cytoplasm.

NGLY1 Antibody (Center) Blocking Peptide - Protocols

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

• Blocking Peptides

NGLY1 Antibody (Center) Blocking Peptide - Images

NGLY1 Antibody (Center) Blocking Peptide - Background

NGLY1 is an enzyme that catalyzes hydrolysis of an N(4)-(acetyl-beta-D-glucosaminyl) asparagine residue to N-acetyl-beta-D-glucosaminylamine and a peptide containing an aspartate residue. The enzyme may play a role in the proteasome-mediated degradation of misfolded glycoproteins.

NGLY1 Antibody (Center) Blocking Peptide - References

Altrich-VanLith, M.L., J. Immunol. 177 (8), 5440-5450 (2006) Katiyar, S., Mol. Biol. Cell 16 (10), 4584-4594 (2005)