

GNPDA2 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP9711a**Specification**

GNPDA2 Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [Q8TDQ7](#)**GNPDA2 Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 132789**Other Names**

Glucosamine-6-phosphate isomerase 2, Glucosamine-6-phosphate deaminase 2, GNPDA 2, GlcN6P deaminase 2, Glucosamine-6-phosphate isomerase SB52, GNPDA2, GNP2

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.

GNPDA2 Antibody (N-term) Blocking Peptide - Protein Information**Name** GNPDA2 {ECO:0000303|PubMed:26887390}**Synonyms** GNP2**Function**

Catalyzes the reversible conversion of alpha-D-glucosamine 6-phosphate (GlcN-6P) into beta-D-fructose 6-phosphate (Fru-6P) and ammonium ion, a regulatory reaction step in de novo uridine diphosphate-N-acetyl-alpha-D-glucosamine (UDP-GlcNAc) biosynthesis via hexosamine pathway. Deamination is coupled to aldo-keto isomerization mediating the metabolic flux from UDP-GlcNAc toward Fru-6P. At high ammonium level can drive amination and isomerization of Fru-6P toward hexosamines and UDP-GlcNAc synthesis. Has a role in fine tuning the metabolic fluctuations of cytosolic UDP-GlcNAc and their effects on hyaluronan synthesis that occur during tissue remodeling.

Cellular Location

Cytoplasm.

Tissue Location

Ubiquitous, with highest expression detected in testis, ovary, placenta, and heart.

GNPDA2 Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

GNPDA2 Antibody (N-term) Blocking Peptide - Images

GNPDA2 Antibody (N-term) Blocking Peptide - Background

Glucosamine-6-phosphate deaminase (EC 3.5.99.6) is an allosteric enzyme that catalyzes the reversible conversion of D-glucosamine-6-phosphate into D-fructose-6-phosphate and ammonium (Arreola et al., 2003 [PubMed 12965206]).

GNPDA2 Antibody (N-term) Blocking Peptide - References

He, M., et al. Arterioscler. Thromb. Vasc. Biol. 30(2):327-332(2010) Li, S., et al. Am. J. Clin. Nutr. 91(1):184-190(2010) Hotta, K., et al. J. Hum. Genet. 54(12):727-731(2009)