10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

GFPT1 Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP8887a

Specification

GFPT1 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession Q06210

GFPT1 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 2673

Other Names
Glutamine--fructose-6-phosphate aminotransferase [isomerizing] 1, D-fructose-6-phosphate amidotransferase 1, Glutamine:fructose-6-phosphate amidotransferase 1, GFAT 1, GFAT1, Hexosephosphate aminotransferase 1, GFPT1, GFAT, GFPT

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP8887a was selected from the N-term region of human GFPT1. 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.

GFPT1 Antibody (N-term) Blocking Peptide - Protein Information

Name GFPT1

Synonyms GFAT, GFPT

Function
Controls the flux of glucose into the hexosamine pathway. Most likely involved in regulating the availability of precursors for N- and O-linked glycosylation of proteins. Regulates the circadian expression of clock genes BMAL1 and CRY1 (By similarity). Has a role in fine tuning the metabolic fluctuations of cytosolic UDP-GlcNAc and its effects on hyaluronan synthesis that occur during tissue remodeling (PubMed:26887390).

Tissue Location

Isoform 1 is predominantly expressed in skeletal muscle. Not expressed in brain. Seems to be selectively expressed in striated muscle.

GFPT1 Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

GFPT1 Antibody (N-term) Blocking Peptide - Images

GFPT1 Antibody (N-term) Blocking Peptide - Background

GFPT1 is the first and rate-limiting enzyme of the hexosamine pathway and controls the flux of glucose into the hexosamine pathway. This protein catalyzes the formation of glucosamine 6-phosphate.

GFPT1 Antibody (N-term) Blocking Peptide - References

Eguchi,S., et.al., Genes Cells 14 (2), 179-189 (2009)Nakaishi,Y., et.al., FEBS Lett. 583 (1), 163-167 (2009)