

# GFPT1 Antibody

Rabbit mAb

Catalog # AP92844

## Product Information

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<b>Application</b>	WB, IHC, IP
<b>Primary Accession</b>	<a href="#">Q06210</a>
<b>Reactivity</b>	Rat, Human, Mouse
<b>Clonality</b>	Monoclonal
<b>Other Names</b>	CMS12; CMSTA1; GFA; GFAT; GFAT1; GFAT1m; GFPT; Gfpt1; GFPT1L; Glucosamine--fructose-6-phosphate aminotransferase [isomerizing] 1; Hexosephosphate aminotransferase 1;
<b>Isotype</b>	Rabbit IgG
<b>Host</b>	Rabbit
<b>Calculated MW</b>	78806

## Additional Information

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<b>Dilution</b>	WB 1:500~1:2000 IHC 1:50~1:200 IP 1:50
<b>Purification</b>	Affinity-chromatography
<b>Immunogen</b>	A synthesized peptide derived from human GFPT1
<b>Description</b>	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.
<b>Storage Condition and Buffer</b>	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

## Protein Information

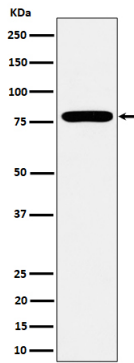
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<b>Name</b>	GFPT1 ( <a href="#">HGNC:4241</a> )
<b>Synonyms</b>	GFAT, GFPT
<b>Function</b>	Rate-limiting enzyme of the hexosamine biosynthetic pathway (HBP) that catalyzes the formation of glucosamine-6-phosphate from fructose-6-phosphate and glutamine, thereby controlling the flux of glucose into this pathway (PubMed: <a href="#">32019926</a> , PubMed: <a href="#">35229715</a> ). Inhibited by UDP-N-acetylglucosamine (UDP-GlcNAc) through a feedback loop (PubMed: <a href="#">32019926</a> , PubMed: <a href="#">35229715</a> ). Fine-tunes the metabolic fluctuations of UDP-GlcNAc and its impacts on hyaluronan synthesis during tissue remodeling (PubMed: <a href="#">26887390</a> ). Via control of the HPB, regulates the availability of precursors for N- and O-linked protein glycosylation and modulates peripheral clock oscillation (By similarity).
<b>Tissue Location</b>	[Isoform 1]: Predominantly expressed in skeletal muscle. Not expressed in

brain. Seems to be selectively expressed in striated muscle.

## Images

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Western blot analysis of GFPT1 expression in MCF7 cell lysate.

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