

KD-Validated Anti-GFPT1 Rabbit Monoclonal Antibody Rabbit monoclonal antibody Catalog # AGI1298

Specification

KD-Validated Anti-GFPT1 Rabbit Monoclonal Antibody - Product Information

Application Primary Accession Reactivity Clonality Isotype Calculated MW Gene Name Aliases	WB, ICC <u>Q06210</u> Rat, Human, Mouse Monoclonal Rabbit IgG Predicted, 79 kDa; observed, 75 kDa KDa GFPT1 GFPT1; GlutamineFructose-6-Phosphate Transaminase 1; GFAT1; GFAT; GFPT; GFA; GlutamineFructose-6-Phosphate Aminotransferase [Isomerizing] 1; Glutamine:Fructose-6-Phosphate Amidotransferase 1; D-Fructose-6-Phosphate Amidotransferase 1; Hexosephosphate Aminotransferase 1; EC 2.6.1.16; GFAT 1; GlucosamineFructose-6-Phosphate Aminotransferase [Isomerizing] 1; Glutamine-Fructose-6-Phosphate Transaminase 1; CMSTA1; GFAT1m; GFPT1L; CMS12; MSLG
Immunogen	A synthesized peptide derived from human GFPT1

KD-Validated Anti-GFPT1 Rabbit Monoclonal Antibody - Additional Information

Gene ID 2673 Other Names Glutamine--fructose-6-phosphate aminotransferase [isomerizing] 1, 2.6.1.16, D-fructose-6-phosphate amidotransferase 1, Glutamine:fructose-6-phosphate amidotransferase 1, GFAT 1, GFAT1, Hexosephosphate aminotransferase 1, GFPT1, GFAT, GFPT

KD-Validated Anti-GFPT1 Rabbit Monoclonal Antibody - 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.

KD-Validated Anti-GFPT1 Rabbit Monoclonal Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

KD-Validated Anti-GFPT1 Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-GFPT1 antibody (Cat#AGI1298). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-GFPT1 antibody (Cat#AGI1298, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.





Western blotting analysis using anti-GFPT1 antibody (Cat#AGI1298). GFPT1 expression in wild type (WT) and GFPT1 knockdown (KD) HSHC cells with 20 μ g of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-GFPT1 antibody (Cat#AGI1298, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Immunocytochemical staining of HepG2 cells with anti-GFPT1 antibody (Cat#AGI1298, 1:1000). Nuclei were stained blue with DAPI; GFPT1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Meidum. Scale bar, 20 µm.