Datasheet for ABIN7317673

GFPT1 Protein

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Overview

Quantity:	50 µg
Target:	GFPT1
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant

Product Details

Purpose:	Recombinant Human GFPT1/GFAT Protein
Sequence:	Gln 332-Glu 699
Characteristics:	The sequence corresponding to amino acids (Gln 332-Glu 699) of human GFAT (AAA58502.1) was expressed and purified with two amino acids (Gly & Pro) at the N-terminus.
Purity:	> 97 % as determined by reducing SDS-PAGE.

Target Details

Target:	GFPT1
Alternative Name:	GFPT1/GFAT (GFPT1 Products)
Background:	Background: Glutamine:fructose-6-phosphate amidotransferase 1 (GFAT), also known as GFPT1, is a member of the N-terminal nucleophile aminotransferases and the first rate-limiting enzyme for the entry of glucose into the hexosamine biosynthesis pathway (HBP) in mammals. GFAT transfers the amino group from the L-glutamine amide to the D-fructose 6-phosphate, producing glutamic acid and glucosamine 6-phosphate. GFAT exists as a homotetramer in

Target Details

	cytoplasm, and is proposed to be most likely involved in regulating the availability of precursors for N- and O-linked glycosylation of proteins. The full length of human GFAT contains 1 glutamine amidotransferase type-2 domain which catalyzes amide nitrogen transfer from glutamine to the appropriate substrate, and 2 SIS (Sugar Isomerase) domains found in many phosphosugar isomerases and phosphosugar binding proteins.Two isoforms of gfat have been identified: GFAT1 is predominantly expressed in skeletal muscle, whereas GFAT2 is expressed mainly in the central nervous system. Synonym: CMSTA1,GFA,GFAT,GFAT1,GFAT1m,GFPT,GFPT1L,MSLG
Molecular Weight:	41.5 kDa
Pathways:	ER-Nucleus Signaling, Regulation of Carbohydrate Metabolic Process

Application Details

Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Please refer to the printed manual for detailed information.
Buffer:	Lyophilized from sterile PBS, pH 7.4, 10 % glycerol
Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.