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PET112 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20796a

Product Information

Application	WB, E
Primary Accession	O75879
Reactivity	Human
Predicted	Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB49790
Calculated MW	61864

Additional Information

Gene ID	5188
Other Names	Glutamyl-tRNA(Gln) amidotransferase subunit B, mitochondrial {ECO:0000255|HAMAP-Rule:MF_03147}, Glu-AdT subunit B {ECO:0000255|HAMAP-Rule:MF_03147}, 635-{ECO:0000255|HAMAP-Rule:MF_03147}, Cytochrome c oxidase assembly factor PET112 homolog, GATB
Target/Specificity	This PET112 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 25-60 amino acids from the N-terminal region of human PET112.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	PET112 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	GATB {ECO:0000255|HAMAP-Rule:MF_03147, ECO:0000312|HGNC:HGNC:8849}

Function	Catalytic subunit of the mitochondrial Glu-tRNA(Gln) amidotransferase complex GatCAB (Probable). GatCAB allows the formation of correctly charged Gln-tRNA(Gln) through the transamidation of misacylated Glu-tRNA(Gln) in the mitochondria (PubMed:19805282). The reaction takes place in the presence of glutamine and ATP through an activated gamma-phospho-Glu-tRNA(Gln) (By similarity). This subunit probably recognizes tRNA(Gln) and mediates the transamidation of misloaded Glu by catalyzing formation of the activated gamma-phospho- intermediate and its subsequent aminolysis using ammonia produced by the gatA subunit (Probable).
Cellular Location	Mitochondrion {ECO:0000255|HAMAP-Rule:MF_03147, ECO:0000269|PubMed:19805282, ECO:0000269|PubMed:9878253}
Tissue Location	Predominantly expressed in tissues characterized by high rates of oxidative phosphorylation (OxPhos), including muscle and heart.

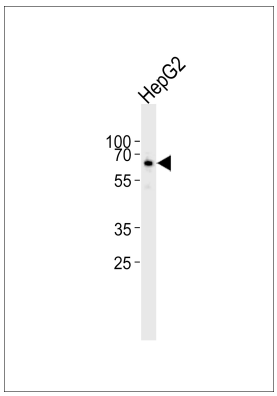
Background

Allows the formation of correctly charged Gln-tRNA(Gln) through the transamidation of misacylated Glu-tRNA(Gln) in the mitochondria. The reaction takes place in the presence of glutamine and ATP through an activated gamma-phospho-Glu- tRNA(Gln).

References

Petruzzella V.,et al.Genomics 54:494-504(1998).
Zhang Q.-H.,et al.Genome Res. 10:1546-1560(2000).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Hillier L.W.,et al.Nature 434:724-731(2005).
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.

Images



Western blot analysis of lysate from HepG2 cell line, using PET112 Antibody (N-term)(Cat. #AP20796a). AP20796a was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.