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PET112L Rabbit pAb

Catalog # AP96780

Product Information

Application	WB
Primary Accession	O75879
Other Accession	O75879
Reactivity	Mouse
Predicted	Rat, Human, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	61864
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human PET112L
Epitope Specificity	101-200/557
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the gatB/gatE family. GatB subfamily.
SUBUNIT	Subunit of the heterotrimeric GatCAB amidotransferase (AdT) complex, composed of A (QRSL1), B (PET112) and C (GATC) subunits.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	PET112L is the human homolog of the S. cerevisiae COX assembly protein pet112, a protein that is believed to play an important role in the translation of mitochondrial genes. PET112L, also known as HSPC199 or Glu-ADT subunit B (glutamyl-tRNA(Gln) amidotransferase subunit B), is a 557 amino acid protein belonging to the gatB/gatE family of proteins (GatB subfamily) and is believed to play a role in energy metabolism. Localizing to mitochondria, PET112L is expressed in tissues such as heart and muscle, which exhibit high rates of oxidative phosphorylation. The gene encoding PET112L is overexpressed in recurrent ependymoma.

Additional Information

Gene ID	5188
Other Names	COXPD41; HSPC199; PET112; PET112L; GATB_HUMAN; GATB; Glu-AdT subunit B; Cytochrome c oxidase assembly factor PET112 homolog; 6.3.5.-; glutamyl-tRNA amidotransferase subunit B; PET112 (yeast homolog)-like; glutamyl-tRNA(Gln) amidotransferase, subunit B
Dilution	WB=1:500-2000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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.

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