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GTPBP3 Antibody(Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19547c

Product Information

Application	WB, E
Primary Accession	Q969Y2
Other Accession	NP_116009.2
Reactivity	Human
Predicted	Mouse, Bovine, Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB40710
Calculated MW	52058
Antigen Region	293-320

Additional Information

Gene ID	84705
Other Names	tRNA modification GTPase GTPBP3, mitochondrial, GTP-binding protein 3, Mitochondrial GTP-binding protein 1, GTPBP3, MTGP1
Target/Specificity	This GTPBP3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 293-320 amino acids from the Central region of human GTPBP3.
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	GTPBP3 Antibody(Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	GTPBP3 (HGNC:14880)
Synonyms	MTGP1

Function	GTPase component of the GTPBP3-MTO1 complex that catalyzes the 5-taurinomethyluridine (taum(5)U) modification at the 34th wobble position (U34) of mitochondrial tRNAs (mt-tRNAs), which plays a role in mt-tRNA decoding and mitochondrial translation (PubMed:29390138, PubMed:33619562). Taum(5)U formation on mammalian mt-tRNA requires the presence of both GTPBP3-mediated GTPase activity and MTO1 catalytic activity (PubMed:29390138).
Cellular Location	Mitochondrion
Tissue Location	Ubiquitously expressed.

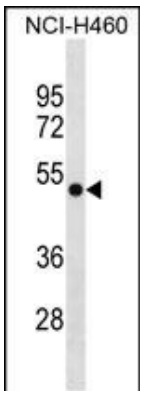
Background

This locus encodes a GTP-binding protein. The encoded protein is localized to the mitochondria and may play a role in mitochondrial tRNA modification. Polymorphisms at this locus may be associated with severity of aminoglycoside-induced deafness, a disease associated with a mutation in the 12S rRNA. Alternatively spliced transcript variants encoding different isoforms have been described.

References

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Bykhovskaya, Y., et al. Mol. Genet. Metab. 83(3):199-206(2004)
Li, X., et al. Biochem. Biophys. Res. Commun. 312(3):747-754(2003)
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Images



GTPBP3 Antibody (Center) (Cat. #AP19547c) western blot analysis in NCI-H460 cell line lysates (35ug/lane).This demonstrates the GTPBP3 antibody detected the GTPBP3 protein (arrow).

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