

GTPBP3 Rabbit pAb

Catalog # AP97737

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q969Y2
Other Accession	Q969Y2
Host	Rabbit
Clonality	Polyclonal
Calculated MW	52058
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human MSS1
Epitope Specificity	101-200/433
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 TRAFAC class TrmE-Era-EngA-EngB-Septin-like GTPase superfamily. TrmE GTPase family.Contains 1 TrmE-type G (guanine nucleotide-binding)
SUBUNIT	Interacts with NDC80 and SQSTM1. Interacts with PAAF1.Interacts with HIV-1 Tat.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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. [provided by RefSeq, Sep 2010]

Additional Information

Gene ID	84705
Other Names	COXPD23; GTPBG3; MSS1; MTGP1; THDF1; GTPB3_HUMAN; GTPBP3; GTP-binding protein 3; Mitochondrial GTP-binding protein 1; tRNA modification GTPase GTPBP3, mitochondrial; 3.6.1.-; GTP binding protein 3, mitochondrial
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
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	GTPBP3 (HGNC:14880)
Synonyms	MTGP1
Function	GTPase component of the GTPBP3-MTO1 complex that catalyzes the 5-aurinomethyluridine (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.

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