10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

GTPBP3 Rabbit pAb

Catalog # AP97737

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q969Y2
Other Accession	Q969Y2
Reactivity	Rat, Mouse
Predicted	Human, Chicken, Horse
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-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.

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