

GTPBP3 Antibody(Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19547c**Specification**

GTPBP3 Antibody(Center) - Product Information

Application	WB,E
Primary Accession	O969Y2
Other Accession	NP_116009.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	52058
Antigen Region	293-320

GTPBP3 Antibody(Center) - 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.

GTPBP3 Antibody(Center) - 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

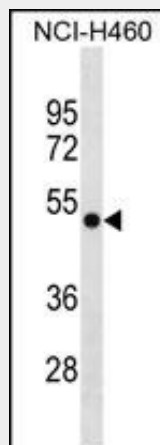
Tissue Location

Ubiquitously expressed.

GTPBP3 Antibody(Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

GTPBP3 Antibody(Center) - 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).

GTPBP3 Antibody(Center) - 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.

GTPBP3 Antibody(Center) - References

Reiling, E., et al. Eur. J. Hum. Genet. 17(8):1056-1062(2009)
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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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