

GTPBP3 Antibody(Center) Blocking peptide
Synthetic peptide
Catalog # BP19547c**Specification**

GTPBP3 Antibody(Center) Blocking peptide - Product InformationPrimary Accession [Q969Y2](#)**GTPBP3 Antibody(Center) Blocking peptide - Additional Information****Gene ID** 84705**Other Names**

tRNA modification GTPase GTPBP3, mitochondrial, GTP-binding protein 3, Mitochondrial GTP-binding protein 1, GTPBP3, MTGP1

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

GTPBP3 Antibody(Center) Blocking peptide - 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) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

GTPBP3 Antibody(Center) Blocking peptide - Images

GTPBP3 Antibody(Center) Blocking peptide - 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) Blocking peptide - References

Reiling, E., et al. Eur. J. Hum. Genet. 17(8):1056-1062(2009) Villarroya, M., et al. Mol. Cell. Biol. 28(24):7514-7531(2008) 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) Li, X., et al. Mol. Cell. Biol. 22(21):7701-7711(2002)