

TUFM Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP2918a

Specification

TUFM Antibody (N-term) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Antigen Region WB, FC, IHC-P,E <u>P49411</u> <u>P85834</u>, <u>O8BFR5</u>, <u>P49410</u> Human Bovine, Mouse, Rat Rabbit Polyclonal Rabbit IgG 75-104

TUFM Antibody (N-term) - Additional Information

Gene ID 7284

Other Names Elongation factor Tu, mitochondrial, EF-Tu, P43, TUFM

Target/Specificity

This TUFM antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 75-104 amino acids from the N-terminal region of human TUFM.

Dilution WB~~1:1000 FC~~1:10~50 IHC-P~~1:50~100 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

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

TUFM Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

TUFM Antibody (N-term) - Protein Information

Name TUFM



Function GTP hydrolase that promotes the GTP-dependent binding of aminoacyl-tRNA to the A-site of ribosomes during protein biosynthesis. Also plays a role in the regulation of autophagy and innate immunity. Recruits ATG5-ATG12 and NLRX1 at mitochondria and serves as a checkpoint of the RIGI-MAVS pathway. In turn, inhibits RLR-mediated type I interferon while promoting autophagy.

Cellular Location Mitochondrion.

TUFM Antibody (N-term) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

TUFM Antibody (N-term) - Images



Western blot analysis of TUFM Antibody (N-term) (Cat. #AP2918a) in Ramos, Hela cell line lysates (35ug/lane). TUFM (arrow) was detected using the purified Pab.



Western blot analysis of TUFM (arrow) using rabbit polyclonal TUFM Antibody (N-term) (Cat. #AP2918a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the TUFM gene.



Formalin-fixed and paraffin-embedded human hepatocarcinoma reacted with TUFM Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



TUFM Antibody (N-term) (Cat.#AP2918a) flow cytometry analysis of Hela cells (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

TUFM Antibody (N-term) - Background

TUFM is a protein which participates in protein translation in mitochondria. This protein promotes



the GTP-dependent binding of aminoacyl-tRNA to the A-site of ribosomes during protein biosynthesis.

TUFM Antibody (N-term) - References

Valente,L., et.al., Biochim. Biophys. Acta 1792 (8), 791-795 (2009) Bogenhagen,D.F., et.al., J. Biol. Chem. 283 (6), 3665-3675 (2008) **TUFM Antibody (N-term) - Citations**

• <u>TUFM downregulation induces epithelial-mesenchymal transition and invasion in lung cancer</u> cells via a mechanism involving AMPK-GSK3β signaling.