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# Anti-TUFM Antibody

Catalog # AP53377

## Product Information

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|---|---|
| **Application** | WB, IHC |
| **Primary Accession** | P49411 |
| **Reactivity** | Human, Mouse, Rat, Pig, Bovine, Dog, Mk |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 49875 |

## Additional Information

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|---|---|
| **Gene ID** | 7284 |
| **Other Names** | Elongation factor Tu mitochondrial; EF-Tu; P43 |
| **Target/Specificity** | KLH-conjugated synthetic peptide encompassing a sequence within the center region of human TUFM. The exact sequence is proprietary. |
| **Dilution** | WB~~ 1:1000 IHC~~1:100~500 |
| **Format** | Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide. |
| **Storage** | Store at -20 °C.Stable for 12 months from date of receipt |

## Protein Information

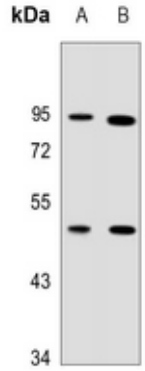
| | |
|---|---|
| **Name** | TUFM |
| **Function** | GTP hydrolase that promotes the GTP-dependent binding of aminoacyl-tRNA to the A-site of ribosomes during protein biosynthesis. Participates in mitochondrial translation (By similarity). Also plays a role in the regulation of autophagy and innate immunity (PubMed:22749352, PubMed:28407488). Recruits ATG5-ATG12 and NLRX1 at mitochondria and serves as a checkpoint of the RIGI-MAVS pathway (PubMed:28407488). In turn, inhibits RLR-mediated type I interferon while promoting autophagy (PubMed:22749352). |
| **Cellular Location** | Mitochondrion matrix |

## References

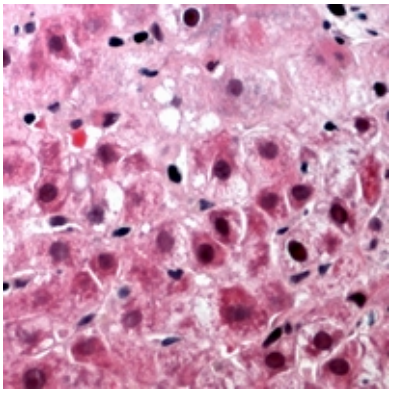
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Wells J.,et al.FEBS Lett. 358:119-125(1995).

Ling M.,et al.Gene 197:325-336(1997).
Martin J.,et al.Nature 432:988-994(2004).
Dunn M.J.,et al.Submitted (MAR-1996) to UniProtKB.

## Images




Western blot analysis of TUFM expression in Jurkat (A), Hela (B) whole cell lysates. (Predicted band size: 49 kD; Observed band size: 50 kD)



Immunohistochemical analysis of TUFM staining in human liver cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. AEC was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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