

GHITM Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP53301**Specification**

GHITM Antibody - Product Information

Application	WB
Primary Accession	Q9H3K2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	37 KDa
Antigen Region	29-78

GHITM Antibody - Additional Information**Gene ID** 27069**Other Names**

Growth hormone-inducible transmembrane protein, Dermal papilla-derived protein 2, Mitochondrial morphology and cristae structure 1, MICS1, Transmembrane BAX inhibitor motif-containing protein 5, GHITM, DERP2, MICS1, TMBIM5

Dilution

WB~~ 1:1000

Format

Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol

Storage

Store at -20 °C.Stable for 12 months from date of receipt

GHITM Antibody - Protein Information**Name** GHITM**Synonyms** DERP2, MICS1, TMBIM5**Function**

Plays an important role in maintenance of mitochondrial morphology and in mediating either calcium or potassium/proton antiport (PubMed:18417609, PubMed:36321428, PubMed:32977469, PubMed:35912435). Mediates proton-dependent calcium efflux from mitochondrion (PubMed:36321428, PubMed:<a

[35912435](http://www.uniprot.org/citations/35912435)). Functions also as an electroneutral mitochondrial proton/potassium exchanger (PubMed:[36321428](http://www.uniprot.org/citations/36321428)). Required for the mitochondrial tubular network and cristae organization (PubMed:[18417609](http://www.uniprot.org/citations/18417609), PubMed:[36321428](http://www.uniprot.org/citations/36321428), PubMed:[32977469](http://www.uniprot.org/citations/32977469)). Involved in apoptotic release of cytochrome c (PubMed:[18417609](http://www.uniprot.org/citations/18417609)). Inhibits the proteolytic activity of AFG3L2, stimulating respiration and stabilizing respiratory enzymes in actively respiring mitochondria (PubMed:[36321428](http://www.uniprot.org/citations/36321428)). However, when mitochondria become hyperpolarized, GHITM loses its inhibitory activity toward AFG3L2 and the now the active AFG3L2 turns first on GHITM and, if hyperpolarization persists, on other proteins of the mitochondria, leading to a broad remodeling of the mitochondrial proteome (PubMed:[36321428](http://www.uniprot.org/citations/36321428)).

Cellular Location

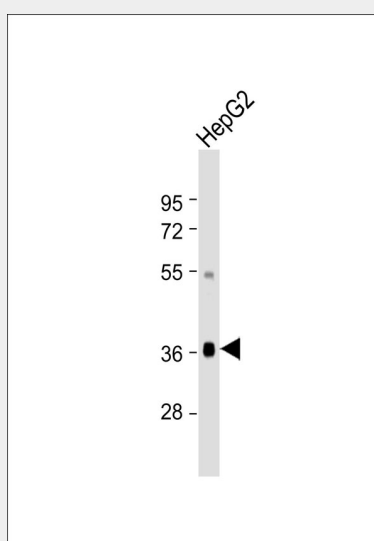
Mitochondrion inner membrane; Multi-pass membrane protein

GHITM Antibody - 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](#)

GHITM Antibody - Images



Anti-GHITM Antibody at 1:1000 dilution + HepG2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 37 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

GHITM Antibody - Background

Required for the mitochondrial tubular network and cristae organization. Involved in apoptotic release of cytochrome c.

GHITM Antibody - References

Ikeda A.,et al.Submitted (DEC-1997) to the EMBL/GenBank/DDBJ databases.
Mei G.,et al.Submitted (FEB-1999) to the EMBL/GenBank/DDBJ databases.
Mao Y.M.,et al.Submitted (APR-1998) to the EMBL/GenBank/DDBJ databases.
Wiemann S.,et al.Genome Res. 11:422-435(2001).
Clark H.F.,et al.Genome Res. 13:2265-2270(2003).