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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

href="http://www.uniprot.org/citations/35912435" target="_blank">35912435). Functions also as an electroneutral mitochondrial proton/potassium exchanger (PubMed:36321428). Required for the mitochondrial tubular network and cristae organization (PubMed:18417609, PubMed:36321428, PubMed:32977469). Involved in apoptotic release of cytochrome c (PubMed:18417609). Inhibits the proteolytic activity of AFG3L2, stimulating respiration and stabilizing respiratory enzymes in actively respiring mitochondria (PubMed: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).

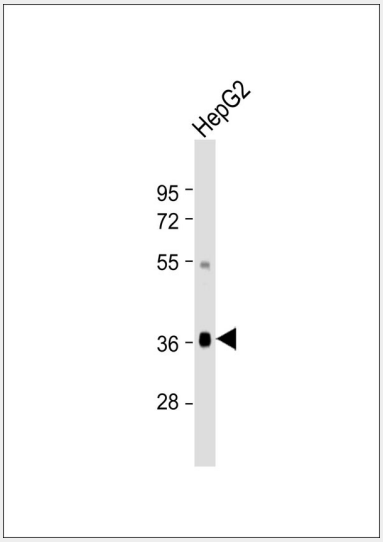
Cellular Location
Mitochondrion inner membrane; Multi-pass membrane protein

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 Cytomety
- 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.

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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).