

GHITM Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP53301

Product Information

Application	WB
Primary Accession	Q9H3K2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	37205

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
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human GHITM. The exact sequence is proprietary.
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

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: 32977469 , PubMed: 35912435 , PubMed: 36321428). Mediates proton-dependent calcium efflux from mitochondrion (PubMed: 35912435 , PubMed: 36321428). Also functions as an electroneutral mitochondrial proton/potassium exchanger (PubMed: 36321428). Required for the mitochondrial tubular network and cristae organization (PubMed: 18417609 , PubMed: 32977469 , PubMed: 36321428). 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

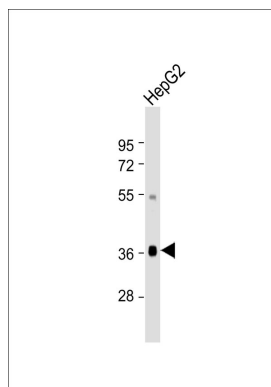
Background

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

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).

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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.