

**GRP75 Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP51270**

**Specification**

---

**GRP75 Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P38646</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	75 KDa
Antigen Region	611 - 670

**GRP75 Antibody - Additional Information**

**Gene ID** 3313

**Other Names**

Stress-70 protein, mitochondrial, 75 kDa glucose-regulated protein, GRP-75, Heat shock 70 kDa protein 9, Mortalin, MOT, Peptide-binding protein 74, PBP74, HSPA9, GRP75, HSPA9B, mt-HSP70

**Target/Specificity**

KLH conjugated synthetic peptide derived from human GRP75

**Dilution**

WB~~ 1:1000

**Format**

0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

**Storage**

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

**GRP75 Antibody - Protein Information**

**Name** HSPA9 ([HGNC:5244](#))

**Synonyms** GRP75, HSPA9B, mt-HSP70

**Function**

Chaperone protein which plays an important role in mitochondrial iron-sulfur cluster (ISC) biogenesis. Interacts with and stabilizes ISC cluster assembly proteins FXN, NFU1, NFS1 and ISCU (PubMed: [26702583](http://www.uniprot.org/citations/26702583)). Regulates erythropoiesis via stabilization of ISC assembly (PubMed: [21123823](http://www.uniprot.org/citations/21123823), PubMed: [26702583](http://www.uniprot.org/citations/26702583)). May play a role in cell cycle regulation via its interaction with and promotion of degradation of TP53

(PubMed:<a href="http://www.uniprot.org/citations/24625977" target="\_blank">24625977</a>, PubMed:<a href="http://www.uniprot.org/citations/26634371" target="\_blank">26634371</a>). May play a role in the control of cell proliferation and cellular aging (By similarity). Molecular adapter that regulates mitochondrial calcium-dependent apoptosis by coupling two calcium channels, ITPR1 and VDAC1, at the mitochondria-associated endoplasmic reticulum (ER) membrane to facilitate calcium transport from the ER lumen to the mitochondria intermembrane space, thus providing calcium for the downstream calcium channel MCU that directly releases it into mitochondria matrix (By similarity).

#### Cellular Location

Mitochondrion. Nucleus, nucleolus. Cytoplasm. Mitochondrion matrix

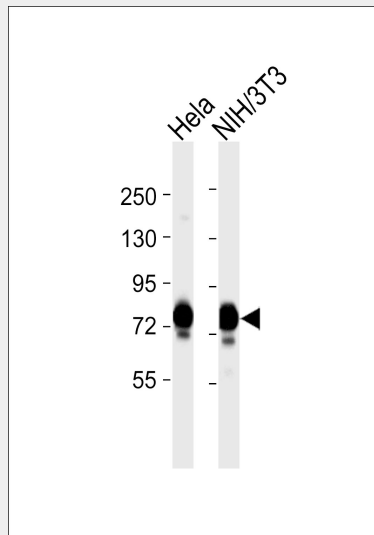
{ECO:0000250|UniProtKB:P48721}. Note=Found in a complex with HSPA9 and VDAC1 at the endoplasmic reticulum-mitochondria contact sites {ECO:0000250|UniProtKB:P48721}

#### GRP75 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](#)

#### GRP75 Antibody - Images



All lanes : Anti-GRP75 Antibody at 1:1000 dilution Lane 1: Hela whole cell lysates Lane 2: NIH/3T3 whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 74 kDa Blocking/Dilution buffer: 5% NFD/MTBST.

#### GRP75 Antibody - Background

Implicated in the control of cell proliferation and cellular aging. May also act as a chaperone.

### **GRP75 Antibody - References**

Domanico S.Z.,et al.Mol. Cell. Biol. 13:3598-3610(1993).

Bhattacharyya T.,et al.J. Biol. Chem. 270:1705-1710(1995).

Ota T.,et al.Nat. Genet. 36:40-45(2004).

Suzuki Y.,et al.Submitted (APR-2005) to the EMBL/GenBank/DDBJ databases.

Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.