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HSPA9 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AW5599

Specification

HSPA9 Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	P38646
Other Accession	Q3ZCH0, O35501, P38647, Q5R511, P48721
Reactivity	**Human, Mouse**
Predicted	**Bovine, Hamster, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**H=74;M=73;R=74 KDa**
Isotype	**Rabbit IgG**
Antigen Source	**HUMAN**

HSPA9 Antibody (Center) - Additional Information

Gene ID 3313

Antigen Region
273-301

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

Dilution
WB~~1:2000

Target/Specificity
This HSPA9 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 273-301 amino acids from the Central region of human HSPA9.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
HSPA9 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

HSPA9 Antibody (Center) - 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). Regulates erythropoiesis via stabilization of ISC assembly (PubMed:21123823, PubMed:26702583). May play a role in cell cycle regulation via its interaction with and promotion of degradation of TP53 (PubMed:24625977, PubMed:26634371). 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).

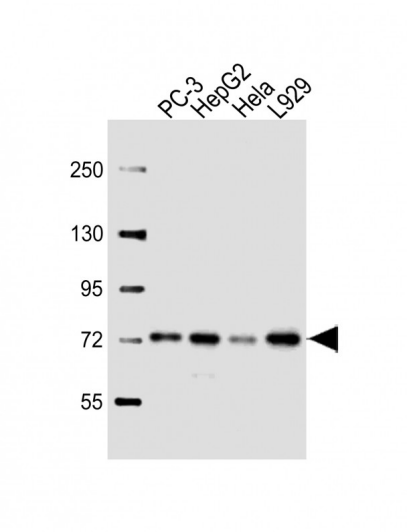
Cellular Location
Mitochondrion. Nucleus, nucleolus. Cytoplasm. Mitochondrion matrix {ECO:0000250|UniProtKB:P48721}. Note=Found in a complex with HSPA9 and VDAC1 at the endoplasmic reticulum-mitochondria contact sites {ECO:0000250|UniProtKB:P48721}

HSPA9 Antibody (Center) - 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

HSPA9 Antibody (Center) - Images



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All lanes : Anti-HSPA9 Antibody (Center) at 1:2000 dilution Lane 1: PC-3 whole cell lysate Lane 2: HepG2 whole cell lysate Lane 3: Hela whole cell lysate Lane 4: L929 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 : 74 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

HSPA9 Antibody (Center) - Background

This gene encodes a member of the heat shock protein 70 gene family. The encoded protein is primarily localized to the mitochondria but is also found in the endoplasmic reticulum, plasma membrane and cytoplasmic vesicles. This protein is a heat-shock cognate protein. This protein plays a role in cell proliferation, stress response and maintenance of the mitochondria. A pseudogene of this gene is found on chromosome 2.

HSPA9 Antibody (Center) - References

Li, Y., et al. Environ. Health Perspect. 118(7):936-942(2010)
Luo, W.I., et al. Protein Expr. Purif. 72(1):75-81(2010)
Goswami, A.V., et al. J. Biol. Chem. 285(25):19472-19482(2010)
Iosefson, O., et al. FEBS Lett. 584(6):1080-1084(2010)
Rikova, K., et al. Cell 131(6):1190-1203(2007)