

**DATASHEET**

**GRP75 Mouse Monoclonal Antibody(C2753)**

CAT. NO. AMA02365

**KEY FEATURES**

Target	GRP75	Source / Host	Mouse
Reactivity	Human, Mouse, Rat, Monkey	Clonality	Monoclonal
Applications	WB, IHC, IF/ICC, FC	Conjugation	Unconjugated
Form / Buffer	Mouse IgG2a. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.	Storage	at-20°C

**BACKGROUND**

Mitochondrial chaperone that plays a key role in mitochondrial protein import, folding, and assembly. Plays an essential role in the protein quality control system, the correct folding of proteins, the re-folding of misfolded proteins, and the targeting of proteins for subsequent degradation. These processes are achieved through cycles of ATP binding, ATP hydrolysis, and ADP release, mediated by co-chaperones . In mitochondria, it associates with the TIM (translocase of the inner membrane) protein complex to assist in the import and folding of mitochondrial proteins . Plays an important role in mitochondrial iron-sulfur cluster (ISC) biogenesis, interacts with and stabilizes ISC cluster assembly proteins FXN, NFS1, NFS2, and NFS3 .

**APPLICATION**

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IHC	1:100 - 1:500
IF/ICC	1:100 - 1:500
FC	1:100 - 1:200

\*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

**PRODUCT OVERVIEW**

Description	Mouse monoclonal to GRP75
Specificity	Recognizes endogenous levels of GRP75 protein
Antibody Type	Primary antibody
Immunogen	Recombinant fusion protein of human GRP75 expressed in HEK293
Purification	This antibody is purified through a protein G column.
Molecular Weight	Predicted: 74 kD; Observed: 74 kD
Form/Buffer	Mouse IgG2a. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	GRP75; HSPA9B; mt-HSP70; Stress-70 protein, mitochondrial; 75 kDa glucose-regulated protein; GRP-75; Heat shock 70 kDa protein 9; Mortalin; MOT; Peptide-binding protein 74; PBP74
Gene Symbol	HSPA9
Entrez Gene	3313(Human); 15526(Mouse)
SwissProt	P38646(Human); P38647(Mouse); P48721(Rat)

\*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact [info@arex.bio](mailto:info@arex.bio) or your local distributor.

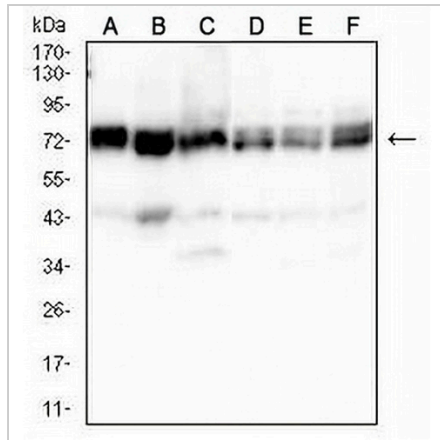
\*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

**DATASHEET**

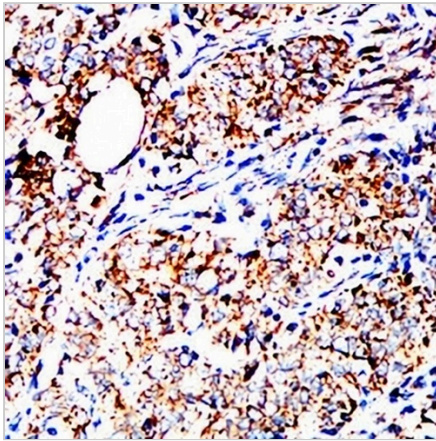
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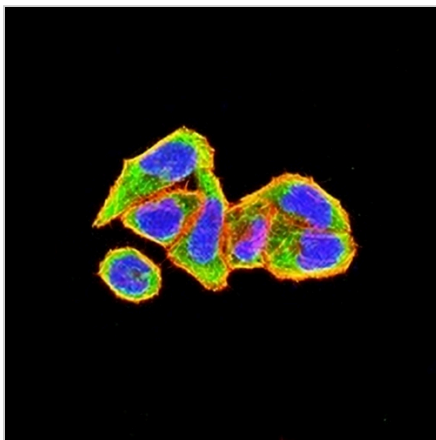
**DATA**



Western blot analysis of GRP75 expression in A549 (A), PANC1 (B), PC12 (C), C6 (D), CSO7 (E), NIH3T3 (F) whole cell lysates. (Predicted band size: 74 kD; Observed band size: 74 kD)



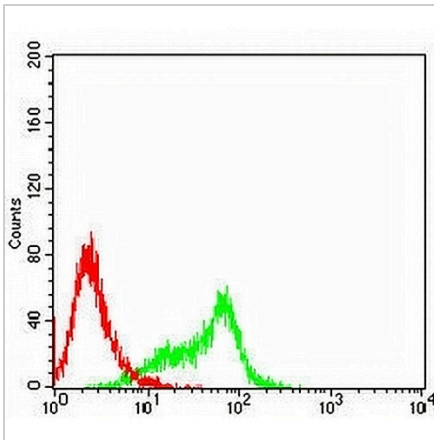
Immunohistochemical analysis of GRP75 staining in human cervical cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of GRP75 staining in HeLa cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with an AREX® Fluor 488 -conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AREX® Fluor 594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

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**DATA (CONTINUED)**

Flow cytometric analysis of HeLa cells using Anti-GRP75 Antibody (green) and negative control (red).

**STORAGE**

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

**NOTE**

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.