DATASHEET

# GRP75 Mouse Monoclonal Antibody(C2754)

CAT. NO. AMA02366

## 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, NFU1, NFS1 and ISCU .

## 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 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@arexbio.com or your local distributor.

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

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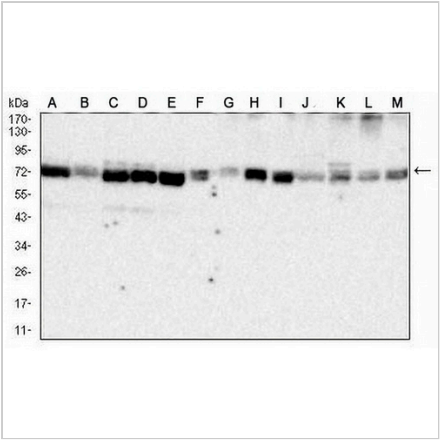
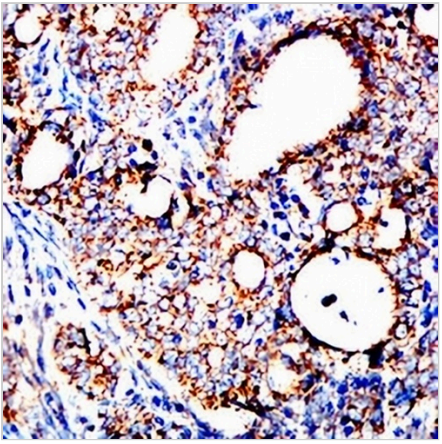
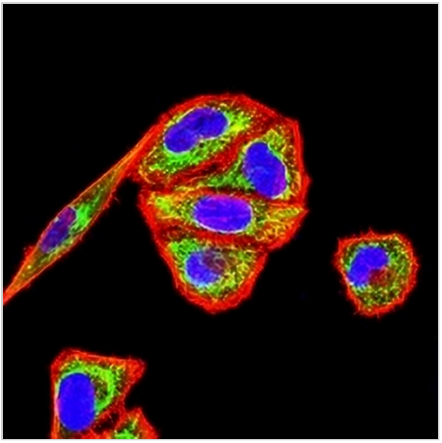
## DATA




Western blot analysis of GRP75 expression in Jurkat (A), HepG2 (B), A431 (C), Hela (D), K562 (E), MCF7 (F), C2C12 (G), A549 (H), PANC1 (I), PC12 (J), C6 (K), COS7 (L), NIH3T3 (M) whole cell lysates. (Predicted band size: 74 kD; Observed band size: 74 kD 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 hidified 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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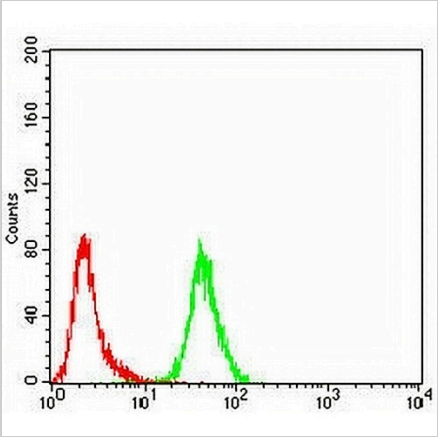
## DATA (CONTINUED)




Flow cytometric analysis of Jurkat 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.