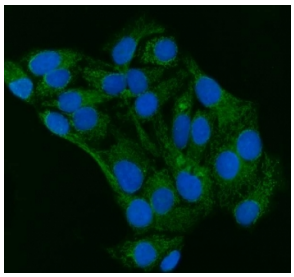
GRP75 Antibody / HSPA9 (R32087)

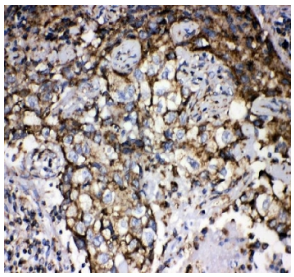
Catalog No.	Formulation	Size
R32087	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

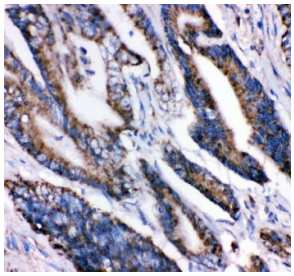
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	P38646
Localization	Cytoplasmic
Applications	Western Blot : 0.1-0.5ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml Flow Cytometry : 1-3ug/million cells Immunofluorescence : 5ug/ml
Limitations	This GRP75 antibody is available for research use only.



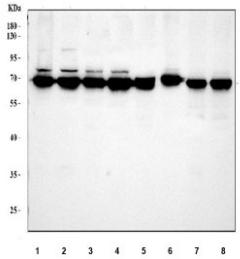
Immunofluorescent staining of FFPE human HeLa cells with GRP75 antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



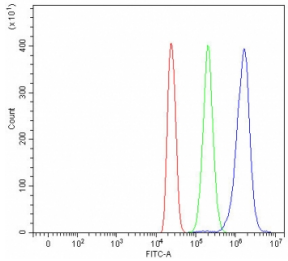
IHC testing of FFPE human lung cancer tissue with GRP75 antibody. HIER: Boil the paraffin sections in pH8 EDTA buffer for 20 minutes and allow to cool prior to staining.



IHC testing of FFPE human intestinal cancer tissue with GRP75 antibody. HIER: Boil the paraffin sections in pH8 EDTA buffer for 20 minutes and allow to cool prior to staining.



Western blot testing of 1) human HeLa, 2) human A549, 3) human Jurkat, 4) human HepG2, 5) rat testis, 6) rat PC-12, 7) mouse testis and 8) mouse NIH 3T3 cell lysate with GRP75 antibody. Predicted molecular weight ~75 kDa.



Flow cytometry testing of human HL60 cells with GRP75 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= GRP75 antibody.

Description

HSPA9 (heat shock 70kDa protein 9 (mortalin)), also known as GRP75, mot-2, mthsp75, PBP74, HSPA9B, MORTALIN or MORTALIN, PERINUCLEAR, is a highly conserved member of the HSP70 family of proteins. It functions as a chaperone in the mitochondria, cytoplasm, and centrosome. The HSPA9 gene is mapped to chromosome 5q31.2 based on an alignment of the HSPA9 sequence with the genomic sequence. Knockdown of HSPA9 in erythroid cultures was associated with an increased number of cells in the G0/G1 phase of the cell cycle and accelerated apoptosis. Knockdown of Hspa9 in mouse bone marrow cells, followed by transplantation into wildtype recipients, also resulted in loss of erythroid cell number. Haploinsufficiency for HSPA9 may contribute to abnormal hematopoiesis in myelodysplastic syndromes. This protein plays a role in the control of cell proliferation.

Application Notes

Optimal dilution of the GRP75 antibody should be determined by the researcher.

Immunogen

Amino acids KLFEMAYKKMASEREGSGSSGTGEQKEDQKEEKQ of human HSPA9/GRP75 were used as the immunogen for the GRP75 antibody.

Storage

After reconstitution, the GRP75 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.