

Basic Information

Product Name	Anti-GRP75/HSPA9 Antibody	
Gene Name	HSPA9	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, ICC/IF, IP, FCM	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human Grp75 identical to the related mouse and rat sequences.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	74 kDa	
Dilution Ratios	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-400
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-400
	ImmunoPrecipitation (IP):	1:200-300
	Flow Cytometry (Fixed):	1:50-200
	(Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied.

Background Information

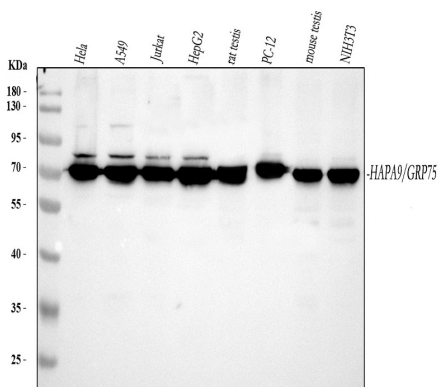
HSPA9 (heat shock 70kDa protein 9 (mortalin)), also known as GRP75, mot-2, mthsp75, PBP74, HSPA9B, MORTALIN or MORTALIN, PERINUCLEAR, is a highly conserved member of the HSP70 family of proteins. It functions as a chaperone in the mitochondria, cytoplasm, and centrosome. The HSPA9 gene is mapped to chromosome 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.

Reference

Anti-GRP75/HSPA9 Antibody被引用在1文献中。

Selected Validation Data



Western blot analysis of GRP75/HSPA9 using anti-GRP75/HSPA9 antibody (PB0668). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human HeLa whole cell lysates,

Lane 2: human A549 whole cell lysates,

Lane 3: human Jurkat whole cell lysates,

Lane 4: human HepG2 whole cell lysates,

Lane 5: rat testis tissue lysates,

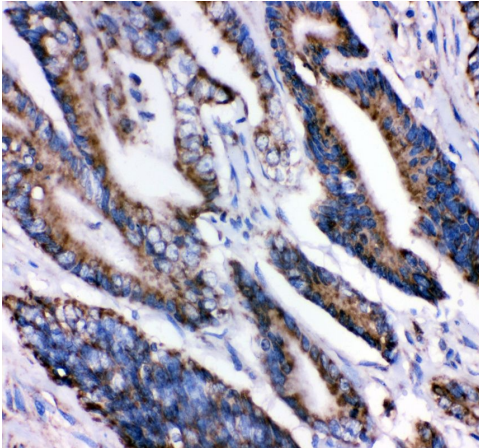
Lane 6: rat PC-12 whole cell lysates,

Lane 7: mouse testis tissue lysates,

Lane 8: mouse NIH/3T3 whole cell lysates.

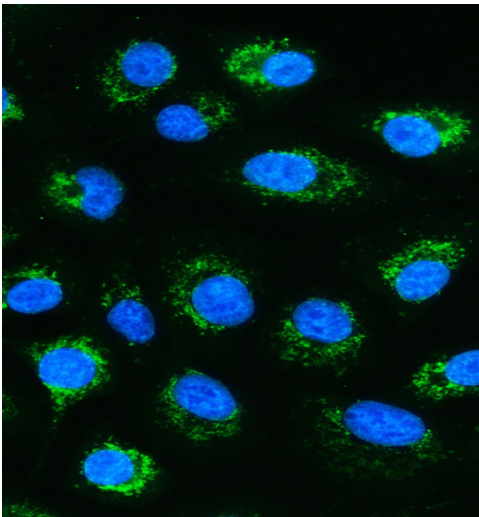
After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-GRP75/HSPA9 antigen affinity purified polyclonal antibody (PB0668) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for GRP75/HSPA9 at approximately 74 kDa. The expected band size for GRP75/HSPA9 is at 74 kDa.



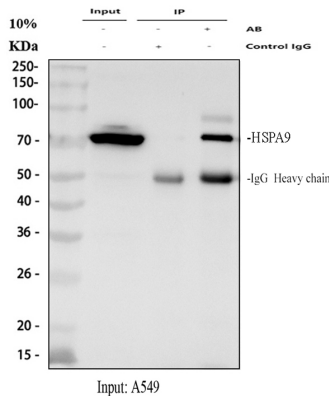
IHC analysis of GRP75/HSPA9 using anti-GRP75/HSPA9 antibody (PB0668) .

GRP75/HSPA9 was detected in a paraffin-embedded section of human intestinal cancer tissue. The tissue section was incubated with rabbit anti-GRP75/HSPA9 Antibody (PB0668) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.



ICC/IF analysis of GRP75/HSPA9 using anti-GRP75/HSPA9 antibody (PB0668).

GRP75/HSPA9 was detected in an immunocytochemical section of A549 cells. The section was incubated with rabbit anti-GRP75/HSPA9 Antibody (PB0668) at a dilution of 1:100. Fluoro488 Conjugated Goat Anti-Rabbit IgG (Green) (Catalog # BA1127) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).



IP analysis of GRP75/HSPA9 using anti-GRP75/HSPA9 antibody (PB0668) in A549 whole cell lysate.

Western blot analysis of GRP75/HSPA9 using anti- GRP75/HSPA9 antibody (PB0668).

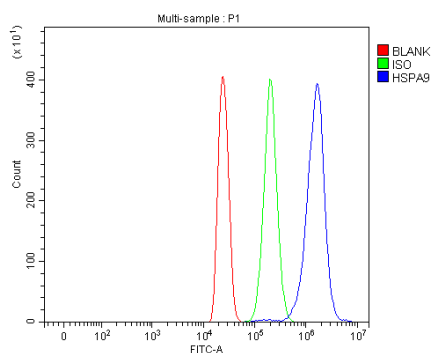
Lane 1: A549 whole cell lysates(30ug),

Lane 2: Rabbit control IgG instead of anti- GRP75/HSPA9 antibody in A549 whole cell lysate,

Lane 3: anti- GRP75/HSPA9 antibody (2μg) + A549 whole cell lysate (500μg).

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti- GRP75/HSPA9 antigen affinity purified polyclonal antibody (PB0668) at a dilution of

1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for GRP75/HSPA9 at approximately 74 kDa. The expected band size for GRP75/HSPA9 is at 74 kDa.



Flow Cytometry analysis of HL-60 cells using anti-GRP75/HSPA9 antibody (PB0668).

Overlay histogram showing HL-60 cells stained with PB0668 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-GRP75/HSPA9 Antibody (PB0668) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.