

Basic Information

Product Name	Anti-HSP70 Antibody	
Gene Name	HSPA1A	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, ICC/IF, 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 Hsp70, different from the related mouse sequence by five amino acids, and from the related rat sequence by three amino acids.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	70 kDa	
Dilution Ratios	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-400
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-400
	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

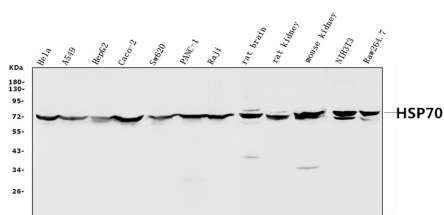
HSPA1 (heat shock 70kDa protein 1A) also known as HSP70-1, HSPA1A, HSP70-1A, HSP72 or HSP70I, is a protein that in humans is encoded by the HSPA1A gene. This intronless gene encodes a 70kDa heat shock protein which is a member of the heat shock protein 70 family. The HSPA1A gene encodes a predicted 641-amino acid protein. The HSPA1 gene is mapped on 6p21.33. Shimizu et al. (1999) found that peripheral blood mononuclear cells of 18 major depression patients expressed a short HSPA1A transcript that utilized exon 1 rather than exon 2, which is found in the more

common HSPA1A transcript. No protein was associated with expression of this short HSPA1A mRNA, possibly due to lack of a TATA box or loss of internal ribosome binding sites. Treatment with BGP-15, a pharmacologic inducer of Hsp72 that can protect against obesity-induced insulin resistance, improved muscular architecture, strength, and contractile function in severely affected diaphragm muscles in mdx dystrophic mice.

Reference

Anti-HSP70 Antibody被引用在5文献中。

Selected Validation Data



Western blot analysis of HSP70 using anti-HSP70 antibody (PB9638).

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 HepG2 whole cell lysates,

Lane 4: human Caco-2 whole cell lysates,

Lane 5: human SW620 whole cell lysates,

Lane 6: human PANC-1 whole cell lysates,

Lane 7: human Raji whole cell lysates,

Lane 8: rat brain tissue lysates,

Lane 9: rat kidney tissue lysates,

Lane 10: mouse kidney tissue lysates,

Lane 11: mouse NIH/3T3 whole cell lysates,

Lane 12: mouse RAW264.7 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-HSP70 antigen

affinity purified polyclonal antibody (PB9638) at a dilution of 1:1000

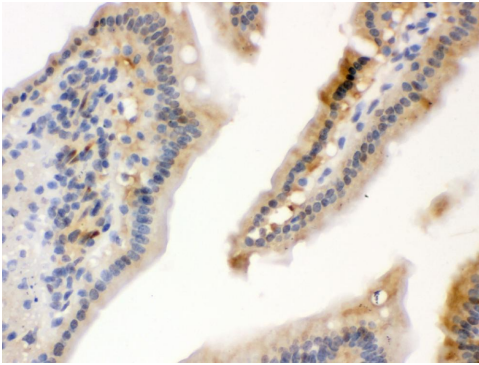
and probed with a goat anti-rabbit IgG-HRP secondary antibody

(Catalog # BA1054). The signal is developed using ECL Plus Western

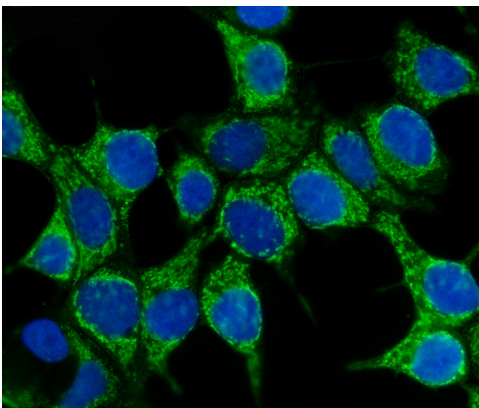
Blotting Substrate (Catalog # AR1197). A specific band was detected

for HSP70 at approximately 70 kDa. The expected band size for

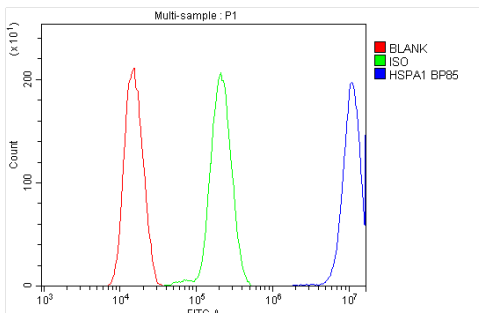
HSP70 is at 70 kDa.



IHC analysis of HSP70 using anti-HSP70 antibody (PB9638). HSP70 was detected in a paraffin-embedded section of mouse intestine tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-HSP70 Antibody (PB9638) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.



ICC/IF analysis of HSP70 using anti-HSP70 antibody (PB9638). HSP70 was detected in an immunocytochemical section of MCF-7 cells. The section was incubated with rabbit anti-HSP70 Antibody (PB9638) 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).



Flow Cytometry analysis of HeLa cells using anti-HSP70 antibody (PB9638).

Overlay histogram showing HeLa cells stained with PB9638 (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-HSP70 Antibody (PB9638) 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.

Product datasheet

Anti-HSP70 Antibody

Catalog Number: **PB9638**

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antibody and ELISA experts

BOSTER BIOLOGICAL TECHNOLOGY

Building C21, 3rd to 5th Floors, Optics Valley Biopharmaceutical Accelerator,
East Lake High-Tech Development Zone, Wuhan.

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