

Basic Information

Product Name	Anti-HSC70/HSPA8 Antibody	
Gene Name	HSPA8	
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	E.coli-derived human Hsc70 recombinant protein (Position: Q520-A614). Human Hsc70 shares 98.9% amino acid (aa) sequence identity with both mouse and rat Hsc70.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	71 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 ImmunoPrecipitation (IP): 1:250-300 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

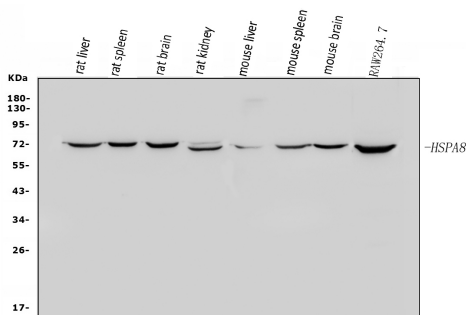
HSPA8 (heat shock 70kDa protein 8) also known as HSC70, HSC71, HSP73, HSPA10, FORMERLY, LAP1 or LPS-ASSOCIATED PROTEIN 1, is a heat shock protein that in humans is encoded by the HSPA8 gene. The HSPA8 gene contains 9 exons and spans 5 kb. The deduced HSPA8 protein has 646 amino acids and a predicted molecular mass of 70,899 Da. And the HSPA8 gene is mapped on 11q24.1. HSPA8 plays an important role in cells by transiently associating with nascent polypeptides to facilitate correct folding. HSP73 also functions as an ATPase in the disassembly of clathrin-coated vesicles during transport of membrane components through the cell. Rapid decay involves AU-rich binding protein AUF1, which complexes with heat-shock proteins HSC70 and HSP70, translation initiation factor EIF4G, and poly (A)-binding protein. In the absence of I13, Hsc70 formed a complex with Hsp40 and Hip, and this complex, in association with Eif4g and Pabp, formed a high-stability complex with Bim mRNA that

protected it from ribonucleases.

Reference

Anti-HSC70/HSPA8 Antibody被引用在1文献中。

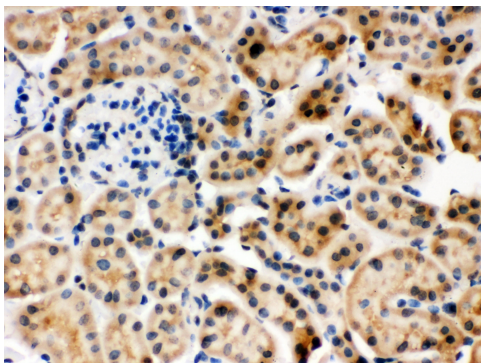
Selected Validation Data



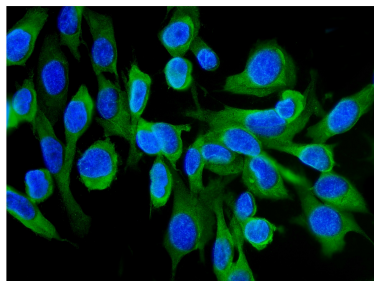
Western blot analysis of HSC70/HSPA8 using anti-HSC70/HSPA8 antibody (PB0678). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: Rat liver tissue lysates,
Lane 2: Rat spleen tissue lysates,
Lane 3: Rat brain tissue lysates,
Lane 4: Rat kidney tissue lysates,
Lane 5: Mouse liver tissue lysates,
Lane 6: Mouse spleen tissue lysates,
Lane 7: Mouse brain tissue lysates,
Lane 8: RAW264.7 whole cell lysates.

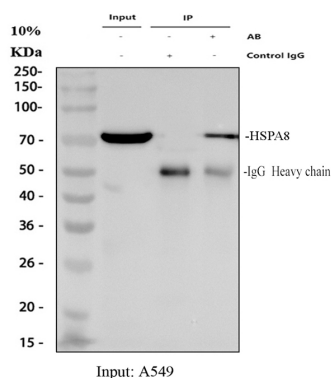
After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-HSC70/HSPA8 antigen affinity purified polyclonal antibody (PB0678) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for HSC70/HSPA8 at approximately 71 kDa. The expected band size for HSC70/HSPA8 is at 71 kDa.



IHC analysis of HSC70/HSPA8 using anti-HSC70/HSPA8 antibody (PB0678). HSC70/HSPA8 was detected in a paraffin-embedded section of mouse kidney tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-HSC70/HSPA8 Antibody (PB0678) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.



IF analysis of HSPA8 using anti-HSPA8 antibody (PB0678). HSPA8 was detected in immunocytochemical section of U2OS cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 2 μ g/mL rabbit anti-HSPA8 Antibody (PB0678) overnight at 4°C. DyLight488 Conjugated Goat Anti-Rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



IP analysis of HSPA8/HSC70 using anti-HSPA8/HSC70 antibody (PB0678) in A549 whole cell lysate.

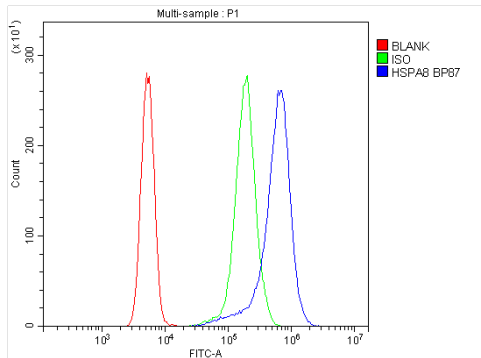
Western blot analysis of HSPA8/HSC70 using anti- HSPA8/HSC70 antibody (PB0678).

Lane 1: A549 whole cell lysates(30 μ g),

Lane 2: Rabbit control IgG instead of anti- HSPA8/HSC70 antibody in A549 whole cell lysate,

Lane 3: anti- HSPA8/HSC70 antibody (2 μ g) + A549 whole cell lysate (500 μ g).

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti- HSPA8/HSC70 antigen affinity purified polyclonal antibody (PB0678) 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 HSPA8/HSC70 at approximately 71 kDa. The expected band size for HSPA8/HSC70 is at 71 kDa.



Flow Cytometry analysis of K562 cells using anti-HSC70/HSPA8 antibody (PB0678).

Overlay histogram showing K562 cells stained with PB0678 (Blue line). The cells were fixed with 4% paraformaldehyde and blocked with 10% normal goat serum. And then incubated with rabbit anti-HSC70/HSPA8 Antibody (PB0678) at 1:100 dilution for 30 min at 20°C. DyLight®488 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.