

Basic Information

Product Name	Anti-HSP60/HSPD1 Antibody	
Gene Name	HSPD1	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, ICC/IF	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human Hsp60 recombinant protein (Position: A260-Q496). Human Hsp60 shares 97% amino acid (aa) sequence identity with both mouse and rat Hsp60.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	61 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 (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

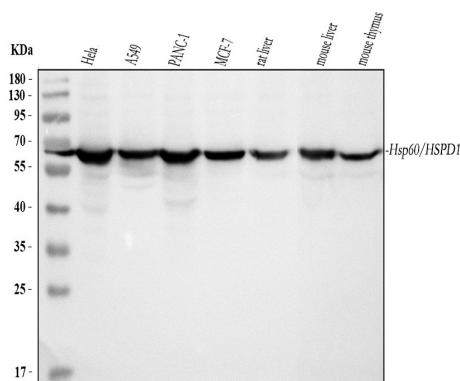
HSP60 is a member of the chaperonin class of protein factors, which include the Escherichia coli groEL protein and the Rubisco subunit-binding protein of chloroplasts. It acts as a costimulator of human regulatory CD4-positive/CD25 - positive T cells, which inhibit lymphoproliferation and IFNG and TNF secretion by CD4-positive and CD8-positive T cells. HSP60 enhances Treg activity via TLR2, leading to activation of an intracellular signaling cascade that included p38, as well as inhibition of ERK phosphorylation. Suppression of target T cells is mediated by both cell-to-cell contact and by secretion of TGFB and IL10, and it leads to downregulation of ERK, NFKB, and TBET expression. The self-molecule HSP60

can downregulate adaptive immune responses by upregulating Tregs through TLR2 signaling.

Reference

Anti-HSP60/HSPD1 Antibody被引用在3文献中。

Selected Validation Data



Western blot analysis of HSP60/HSPD1 using anti-HSP60/HSPD1 antibody (PB9337). 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 PANC-1 whole cell lysates,

Lane 4: human MCF-7 whole cell lysates,

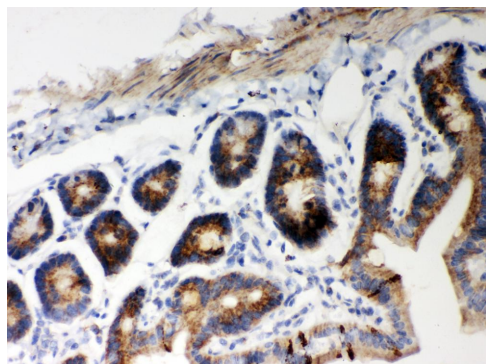
Lane 5: rat liver tissue lysates,

Lane 6: mouse liver tissue lysates,

Lane 7: mouse thymus tissue lysates.

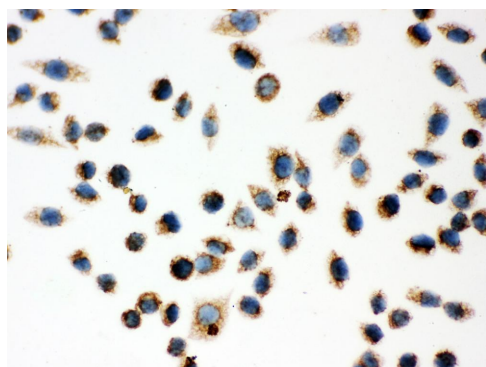
After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-HSP60/HSPD1 antigen affinity purified polyclonal antibody (PB9337) 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 HSP60/HSPD1 at approximately 61 kDa. The expected band size for HSP60/HSPD1 is at 61 kDa.



IHC analysis of HSP60/HSPD1 using anti-HSP60/HSPD1 antibody (PB9337).

HSP60/HSPD1 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-HSP60/HSPD1 Antibody (PB9337) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.



ICC analysis of HSP60/HSPD1 using anti- HSP60/HSPD1 antibody (PB9337).

HSP60/HSPD1 was detected in an immunocytochemical section of SMMC-7721 cells. The section was incubated with rabbit anti-HSP60/HSPD1 Antibody (PB9337) at a dilution of 1:100. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.