

## 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, FCM	
Contents	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of rat HSP60, different from the related human sequence by one amino acid.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	61 kDa	
Dilution Ratios	Western blot (WB): Immunohistochemistry (IHC): Immunocytochemistry/Immunofluorescence (ICC/IF): Flow Cytometry (Fixed): (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.	1:500-2000 1:50-400 1:50-400 1:50-200

## Storage

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

## Background Information

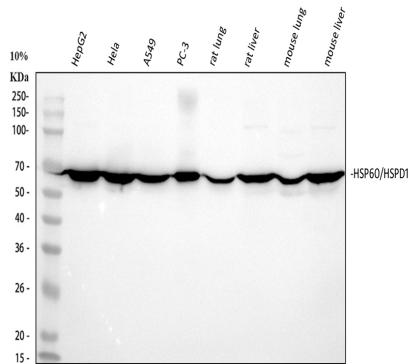
HSP60 is a member of the chaperonin class of protein factors, which include the *Escherichia coli* groEL protein and the Rubisco subunit-binding protein of chloroplasts. It acts as a costimulator of human regulatory CD4-positive/CD25-positive T cells, which inhibit lymphoproliferation and IFNG and TNF 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。

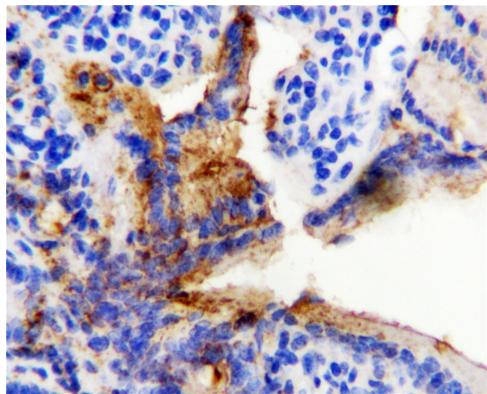
## Selected Validation Data



Western blot analysis of HSP60/HSPD1 using anti-HSP60/HSPD1 antibody (BA1511). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

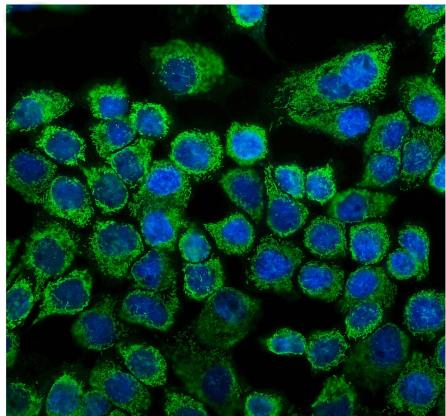
Lane 1: human HepG2 whole cell lysates,  
Lane 2: human HeLa whole cell lysates,  
Lane 3: human A549 whole cell lysates,  
Lane 4: human PC-3 whole cell lysates,  
Lane 5: rat lung tissue lysates,  
Lane 6: rat liver tissue lysates,  
Lane 7: mouse lung tissue lysates,  
Lane 8: mouse liver tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-HSP60/HSPD1 antigen affinity purified polyclonal antibody (BA1511) 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.



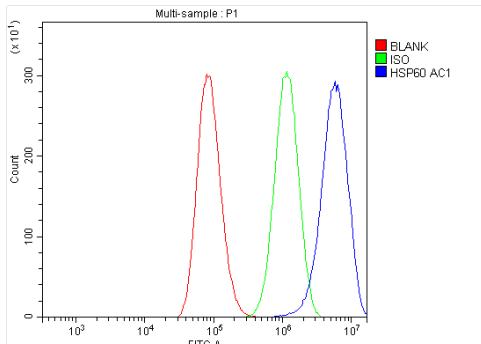
IHC analysis of HSP60/HSPD1 using anti-HSP60/HSPD1 antibody (BA1511).

HSP60/HSPD1 was detected in a paraffin-embedded section of rat intestine tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-HSP60/HSPD1 Antibody (BA1511) 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 HSP60/HSPD1 using anti-HSP60/HSPD1 antibody (BA1511).

HSP60/HSPD1 was detected in an immunocytochemical section of A431 cells. The section was incubated with rabbit anti-HSP60/HSPD1 Antibody (BA1511) 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 A549 cells using anti-HSP60/HSPD1 antibody (BA1511).

Overlay histogram showing A549 cells stained with BA1511 (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-HSP60/HSPD1 Antibody (BA1511) 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.