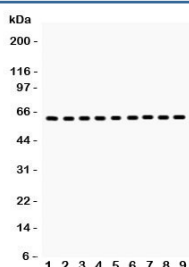


HSP60 Antibody / HSPD1 (R31750)

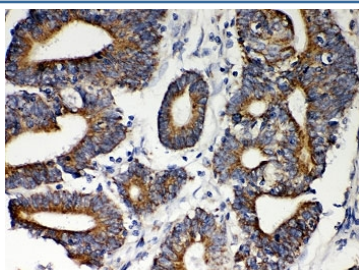
Catalog No.	Formulation	Size
R31750	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

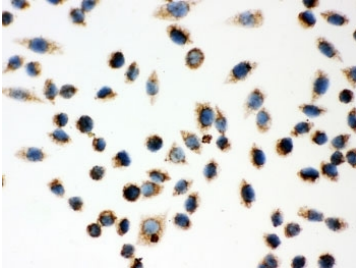
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
Gene ID	3329
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 0.5-1ug/ml Immunocytochemistry : 0.5-1ug/ml Immunofluorescence : 2-3ug/ml Flow Cytometry : 1-3ug/10 ⁶ cells
Limitations	This HSP60 antibody is available for research use only.



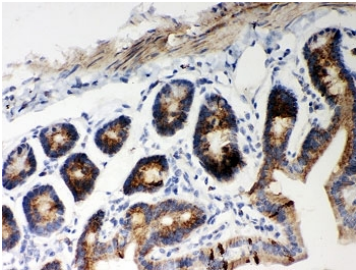
Western blot testing of HSP60 antibody and Lane 1: rat kidney; 2: mouse kidney; 3: (m) HEPA; 4: (r) NRK; 5: (r) PC12; 6: human SW620; 7: (h) A549; 8: (h) A431; 9: (h) HeLa lysate. Predicted/observed molecular weight: ~60 kDa.



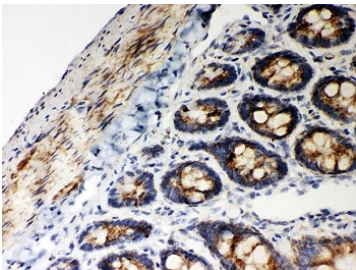
IHC-P: HSP60 antibody testing of human intestine cancer tissue. HIER: steamed with pH6 citrate buffer.



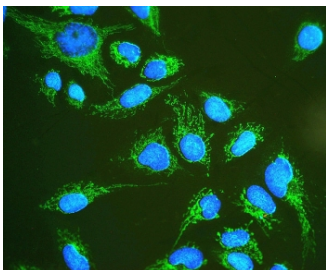
ICC testing of HSP60 antibody and SMMC-7721 cells



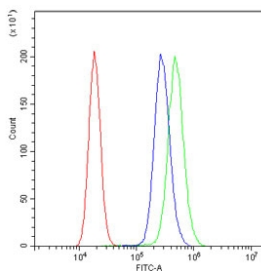
IHC-P testing of mouse intestine tissue. HIER: steamed with pH6 citrate buffer.



IHC-P testing of rat intestine tissue. HIER: steamed with pH6 citrate buffer.



Immunofluorescent staining of FFPE human U-2 OS cells with HSP60 antibody (green) at 2ug/ml and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Flow cytometry testing of human A431 cells with HSP60 antibody at 1ug/10⁶ cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= HSP60 antibody.

Description

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 TGFβ 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.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the HSP60 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

Human partial recombinant protein (AA 260-496) was used as the immunogen for this HSP60 antibody.

Storage

After reconstitution, the HSP60 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.