

Basic Information

Product Name	Anti-HSP60/HSPD1 Antibody (Clone#DOI-8)
Gene Name	HSPD1
Source	Rabbit
Clonality	Monoclonal
Isotype	IgG
Species Reactivity	human, mouse, rat
Tested Application	WB, IHC
Contents	500 ug/ml; Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide, 0.4-0.5 mg/ml BSA and 50% glycerol.
Immunogen	A synthesized peptide derived from human Hsp60
Concentration	500 ug/ml
Purification	Affinity-chromatography
Observed MW	61 kDa
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC):1:50-200

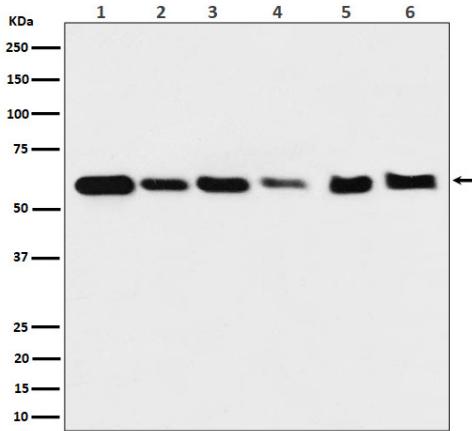
Storage

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

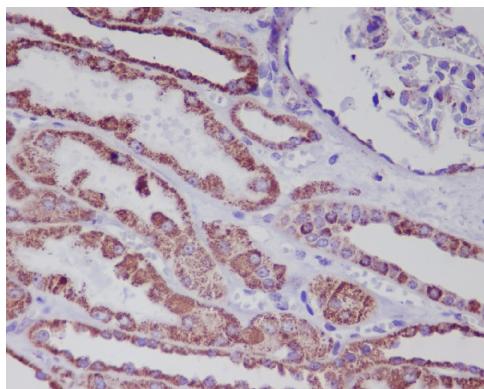
Background Information

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.

Selected Validation Data



Western blot analysis of Hsp60 expression in (1) HeLa cell lysate; (2) 293T cell lysate; (3) NIH/3T3 cell lysate; (4) Mouse heart lysate; (5) PC-12 cell lysate; (6) Rat heart lysate.



Immunohistochemical analysis of paraffin-embedded human kidney, using Hsp60 Antibody .