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Product datasheet for AM20630PU-N

Hsp60 (HSPD1) Mouse Monoclonal Antibody [Clone ID: SJ-60]

Product data:

Product Type:	Primary Antibodies
Clone Name:	SJ-60
Applications:	IHC, IP, WB
Recommended Dilution:	Western Blot: 2 - 4 µg/ml. Immunohistochemistry on paraffin sections: 4 - 8 µg/ml.
Reactivity:	Chicken, Human, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Recombinant human heat shock protein 60 (HSP60)
Specificity:	This antibody reacts to HSP60.
Formulation:	1.2 % sodium acetate, with 2 mg BSA and 0.01 mg sodium azide as preservative State: Purified State: Lyphilized purified Ig fraction
Reconstitution Method:	Restore with 1.2% sodium acetate or neutral PBS
Concentration:	0,1 mg/ml (after reconstitution with PBS)
Purification:	Affinity chromatography
Conjugation:	Unconjugated
Storage:	Prior to reconstitution store at -20°C. Following reconstitution store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	heat shock protein family D (Hsp60) member 1
Database Link:	Entrez Gene 63868 RatEntrez Gene 3329 Human P10809

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Background: Heat shock 60KD protein (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 TNFsecretion 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.

Synonyms: HSP-60, HSPD1, Heat shock protein 60, Chaperonin 60, HuCHA60, GROEL, GroEL Homolog, CPN60

Protein Families: Druggable Genome, Stem cell - Pluripotency

Protein Pathways: RNA degradation, Type I diabetes mellitus

Product images: