



Product Information Sheet

Monoclonal Anti-Heat Shock Protein 60, *HSP60*

Catalogue No. MA1049

Immunogen

Recombinant human heat shock protein 60 (HSP60)¹

Lot No. 08A12

Purification

Purified by the goat anti-mouse IgG affinity chromatography.

Clone: SJ-60

Ig type: mouse IgG1

Application

Western blot

Size: 100µg/vial

At 2-4µg/ml with the appropriate system to detect HSP60 in cells and tissues.

Specificity

Human, chicken, rat.

No cross reactivity with other proteins.

Immunohistochemistry(P)

At 4-8µg/ml to detect HSP60 in formalin fixed and paraffin embedded tissues.

Other applications have not been tested.

Optimal dilutions should be determined by end user.

Recommended application

Western blot

Immunohistochemistry(P)

Formulation

Lyophilized from 1.2% sodium acetate, with 2mg BSA and 0.01mg NaN₃ as preservative.

Reconstitution

1.2% sodium acetate or neutral PBS. If 1ml of PBS is used, the antibody concentration will be 100µg/ml.

To reorder contact us at:

Antagene, Inc.

Toll Free: 1(866)964-2589

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Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for longer time.

BACKGROUND

Heat shock 60KD protein (HSP60) is a member of the chaperonin class of protein factors and the nuclear encoded mitochondrial HSP60 is required for the assembly into oligomeric complexes of proteins imported into the mitochondrial matrix. HSP60 is linked head to head comprising approximately 17 kb and consist of 12 exons. HSP60 is a self-molecule, it can downregulate adaptive immune responses by upregulating Tregs innately through TLR2 signaling.

REFERENCE

1. Cheng, M. Y.; Hartl, F.-U.; Martin, J.; Pollock, R. A.; Kalousek, F.; Neupert, W.; Hallberg, E. M.;

FOR RESEARCH USE ONLY. NOT FOR DIAGNOSTIC AND CLINICAL USE.

- Hallberg, R. L.; Horwich, A. L. : Mitochondrial heat-shock protein hsp60 is essential for assembly of proteins imported into yeast mitochondria. *Nature* 337: 620-625, 1989.
2. Hansen, J. J.; Bross, P.; Westergaard, M.; Nielsen, M. N.; Eiberg, H.; Borglum, A. D.; Mogensen, J.; Kristiansen, K.; Bolund, L.; Gregersen, N. : Genomic structure of the human mitochondrial chaperonin genes: HSP60 and HSP10 are localised head to head on chromosome 2 separated by a bidirectional promoter. *Hum. Genet.* 112: 71-77, 2003. Note: Erratum: *Hum. Genet.* 112: 436 only, 2003.
3. Zanin-Zhorov, A.; Cahalon, L.; Tal, G.; Margalit, R.; Lider, O.; Cohen, I. R. : Heat shock protein 60 enhances CD4+CD25+ regulatory T cell function via innate TLR2 signaling. *J. Clin. Invest.* 116: 2022-2032, 2006.