Product Information Sheet

Monoclonal Anti-Heat Shock Protein 60, *HSP60* - conjugated to Magnetic Beads

Catalogue No. MA1049-M

Lot No. 08A12

Clone: SJ-60

Ig type: mouse IgG1

Size: 200µl

Specificity

Human, chicken, rat.

No cross reactivity with other proteins.

Recommended application

Immunoprecipitation(IP)

Immunogen

Recombinant human heat shock protein 60 (HSP60)[1]

Purification

Purified by the goat anti-mouse IgG affinity chromatography.

Formulation

Each vial contains 1mg/ml Magnetic Bead in PBS, pH 7.2, 0.05mg NaN_3.

Storage

Store at 4˚C for frequent use.

Description

This Antagene antibody is immobilized by the covalent reaction of hydrazinonicotinamide-modified antibody with formylbenzamide-modified beads. It is useful for immunoprecipitation.

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.; 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.