

Anti-HSP60 Antibody (Monoclonal, LK1)
Catalog # ABO10438**Specification**

Anti-HSP60 Antibody (Monoclonal, LK1) - Product Information

Application	WB, IHC-P
Primary Accession	P63039
Host	Mouse
Isotype	Mouse IgG1
Reactivity	Human, Rat
Clonality	Monoclonal
Format	Lyophilized

Description

Mouse IgG monoclonal antibody for HSP60, heat shock 60kDa protein 1 (chaperonin) (HSPD1) detection. Tested with WB, IHC-P in Human;rat;chicken. No cross reactivity with other proteins.

Reconstitution

Add 1ml of PBS buffer will yield a concentration of 100ug/ml.

Anti-HSP60 Antibody (Monoclonal, LK1) - Additional Information

Gene ID 63868

Other Names

60 kDa heat shock protein, mitochondrial, 60 kDa chaperonin, Chaperonin 60, CPN60, HSP-65, Heat shock protein 60, HSP-60, Hsp60, Mitochondrial matrix protein P1, Hspd1, Hsp60

Calculated MW

60955 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 4-8 µg/ml, Human, chicken, rat, By Heat

Western blot, 2-4 µg/ml, Human, chicken, rat

Subcellular Localization

Mitochondrion matrix .

Protein Name

60 kDa heat shock protein, mitochondrial

Contents

Mouse ascites fluid, 1.2% sodium acetate, 2mg BSA, with 0.01mg NaN3 as preservative.

Immunogen

Recombinant human heat shock protein 60(HSP60)

Purification

Ascites

Cross Reactivity

No cross reactivity with other proteins

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 a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the chaperonin (HSP60) family.

Anti-HSP60 Antibody (Monoclonal, LK1) - Protein Information

Name Hspd1

Synonyms Hsp60

Function

Chaperonin implicated in mitochondrial protein import and macromolecular assembly. Together with Hsp10, facilitates the correct folding of imported proteins. May also prevent misfolding and promote the refolding and proper assembly of unfolded polypeptides generated under stress conditions in the mitochondrial matrix. The functional units of these chaperonins consist of heptameric rings of the large subunit Hsp60, which function as a back-to-back double ring. In a cyclic reaction, Hsp60 ring complexes bind one unfolded substrate protein per ring, followed by the binding of ATP and association with 2 heptameric rings of the co-chaperonin Hsp10. This leads to sequestration of the substrate protein in the inner cavity of Hsp60 where, for a certain period of time, it can fold undisturbed by other cell components. Synchronous hydrolysis of ATP in all Hsp60 subunits results in the dissociation of the chaperonin rings and the release of ADP and the folded substrate protein.

Cellular Location

Mitochondrion matrix {ECO:0000250|UniProtKB:P10809}

Anti-HSP60 Antibody (Monoclonal, LK1) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-HSP60 Antibody (Monoclonal, LK1) - Images**Anti-HSP60 Antibody (Monoclonal, LK1) - 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.