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Hsp60 Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AP52841

Product Information

Application	WB, ICC, IP
Primary Accession	P10809
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2b
Calculated MW	61055

Additional Information

Gene ID	3329
Other Names	60 kDa chaperonin;60 kDa heat shock protein mitochondrial;60 kDa heat shock protein, mitochondrial;CH60_HUMAN;Chaperonin 60;Chaperonin;Chaperonin, 60-KD;CPN 60;CPN60;fa04a05;GROEL;GroEL Homolog;Heat shock 60kD protein 1 chaperonin;Heat shock 60kDa protein 1;Heat shock protein 1 (chaperonin);Heat Shock Protein 60;Heat shock protein 65;HLD4;Hsp 60;HSP 65;HSP-60;HSP60;HSP65;HSPD 1;HSPD1;HuCHA60;Mitochondrial matrix protein P1;P60 lymphocyte protein;Short heat shock protein 60 Hsp60s1;Spastic paraplegia 13;SPG 13;SPG13.
Dilution	WB~~1:1000 ICC~~1:100 IP~~1:500
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide, pH 7.3.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

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 (PubMed:11422376, PubMed:1346131). 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 (Probable).

Cellular Location Mitochondrion matrix.

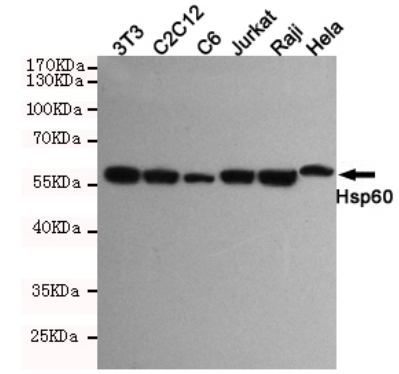
Background

Implicated in mitochondrial protein import and macromolecular assembly. May facilitate 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.

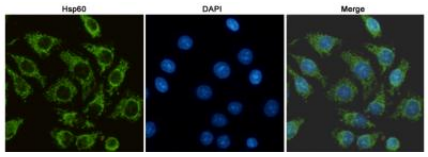
References

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Venner T.J.,et al.DNA Cell Biol. 9:545-552(1990).
Hansen J.J.,et al.Hum. Genet. 112:71-77(2003).
Tan J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).

Images

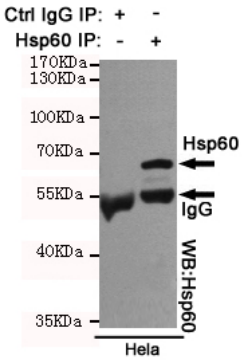


Western blot detection of Hsp60 in Hela,Raji,Jurkat,C6,C2C12 and 3T3 cell lysates using Hsp60 mouse mAb (1:1000 diluted).Predicted band size:60KDa.Observed band size:60KDa.



Immunocytochemistry staining of HeLa cells fixed with -20℃ Methanol and using Hsp60 mouse mAb (dilution 1:100).

Immunoprecipitation analysis of Hela cell lysates using Hsp60 mouse mAb.



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