

KD-Validated Anti-HSPD1 Rabbit Polyclonal Antibody

Rabbit polyclonal antibody

Catalog # AGI1769

Product Information

Application	WB
Primary Accession	P10809
Reactivity	Rat, Human, Mouse
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	61055
Gene Name	HSPD1
Aliases	HSPD1; Heat Shock Protein Family D (Hsp60) Member 1; HSP60; GroEL; 60 KDa Heat Shock Protein, Mitochondrial; Heat Shock 60kDa Protein 1 (Chaperonin); Mitochondrial Matrix Protein P1; P60 Lymphocyte Protein; 60 KDa Chaperonin; Chaperonin 60; HuCHA60; HSP-60; CPN60; SPG13; Spastic Paraplegia 13 (Autosomal Dominant); Epididymis Secretory Sperm Binding Protein; Heat Shock 60kD Protein 1 (Chaperonin); Short Heat Shock Protein 60 Hsp60s1; Heat Shock Protein 65; Heat Shock Protein 60; EC 5.6.1.7; HSP65; Hsp60; HLD4
Immunogen	A synthesized peptide derived from human HSP60

Additional Information

Gene ID	3329
Other Names	60 kDa heat shock protein, mitochondrial, 5.6.1.7, 60 kDa chaperonin, Chaperonin 60, CPN60, Heat shock protein 60, HSP-60, Hsp60, Heat shock protein family D member 1, HuCHA60, Mitochondrial matrix protein P1, P60 lymphocyte protein, HSPD1, HSP60

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.

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