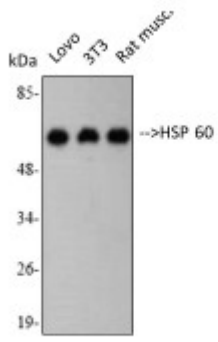
Anti-HSP60 antibody



Description	HSP60 is a protein encoded by the HSPD1 gene which is approximately 61 kDa. HSP60 is localised to the mitochondrion matrix and is involved in gene expression, transcriptional regulation, legionellosis and deadenylation-dependent mRNA decay. This protein falls under the chaperonin family. It is essential for the folding and assembly of newly imported proteins in the mitochondria. It also prevents misfolding and promote the refolding of unfolded polypeptides generated under stress conditions in the mitochondrial matrix. HSP60 is expressed in liver, nervous system, blood, lung and skin. Mutations in the HSPD1 gene result in spastic paraplegia and leukodystrophy. STJ93621 was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen. This polyclonal antibody detects endogenous levels of HSP60 protein.

Model	STJ93621
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, IF, IHC, WB
Immunogen	Synthesized peptide derived from human HSP60
Immunogen Region	480-560 aa, C-terminal
Gene ID	3329
Gene Symbol	HSPD1
Dilution range	WB 1:500-1:2000IHC 1:100-1:300IF 1:200-1:1000ELISA 1:10000
Specificity	HSP60 Polyclonal Antibody detects endogenous levels of HSP60 protein.

Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	60 kDa heat shock protein, mitochondrial 60 kDa chaperonin Chaperonin 60 CPN60 Heat shock protein 60 HSP-60 Hsp60 HuCHA60 Mitochondrial matrix protein P1 P60 lymphocyte protein
Molecular Weight	68 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:5261OMIM:118190
Alternative Names	60 kDa heat shock protein, mitochondrial 60 kDa chaperonin Chaperonin 60 CPN60 Heat shock protein 60 HSP-60 Hsp60 HuCHA60 Mitochondrial matrix protein P1 P60 lymphocyte protein
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 (Probable).
Cellular Localization	Mitochondrion matrix.