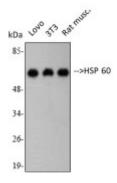


Anti-HSP60 antibody





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 <u>3329</u>

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:52610MIM: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.