

# Hsp60 Antibody

Rabbit mAb Catalog # AP90431

#### **Product Information**

ApplicationWB, IHCPrimary AccessionP10809

Reactivity Rat, Human, Mouse

**Clonality** Monoclonal

Other Names HSPD1;CPN60;GROEL;HLD4;HSP60;HSP65;HuCHA60;SPG13;

IsotypeRabbit IgGHostRabbitCalculated MW61055

### **Additional Information**

**Dilution** WB 1:500~1:2000 IHC 1:50~1:200

**Purification** Affinity-chromatography

**Immunogen** A synthesized peptide derived from human Hsp60

**Description** HSP60 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. Belongs to the chaperonin (HSP60) family. Interacts

with HBV protein X and HTLV-1 protein p40tax.

**Storage Condition and Buffer** Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium

azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term.

Avoid freeze / thaw cycle.

#### **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:<u>11422376</u>, PubMed:<u>1346131</u>). 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

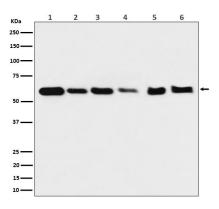
by the binding of ATP and association with 2 heptameric rings of the

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.

## **Images**



Western blot analysis of Hsp60 expression in (1) HeLa cell lysate; (2) 293T cell lysate; (3) NIH/3T3 cell lysate; (4) Mouse heart lysate; (5) PC-12 cell lysate; (6) Rat heart lysate.

Image not found: 202311/AP90431-IHC.jpg

Immunohistochemical analysis of paraffin-embedded human kidney, using Hsp60 Antibody .

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