

Goat Anti-CPN10 / HSPE1 Antibody (internal region)
Purified Goat Polyclonal Antibody
Catalog # AF4263a**Specification**

Goat Anti-CPN10 / HSPE1 Antibody (internal region) - Product Information

Application	WB, E
Primary Accession	P61604
Other Accession	15528(mouse) , 25462(rat) , NP_002148.1
Reactivity	Human
Predicted	Human, Mouse, Rat, Pig, Dog
Host	Goat
Clonality	Polyclonal
Concentration	0.5
Calculated MW	10932

Goat Anti-CPN10 / HSPE1 Antibody (internal region) - Additional Information**Gene ID** 3336**Other Names**

HSPE1; heat shock 10kDa protein 1; CPN10; EPF; GROES; HSP10; 10 kDa chaperonin; 10 kDa heat shock protein, mitochondrial; chaperonin 10; early-pregnancy factor; heat shock 10kD protein 1 (chaperonin 10)

Dilution

WB~~1:1000

E~~N/A

Format

Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin. Aliquot and store at -20°C. Minimize freezing and thawing.

Immunogen

Peptide with sequence C-PEKSQGKVLQAT, from the internal region of the protein sequence according to NP_002148.1.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-CPN10 / HSPE1 Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-CPN10 / HSPE1 Antibody (internal region) - Protein Information

Name HSPE1**Function**

Co-chaperonin implicated in mitochondrial protein import and macromolecular assembly. Together with Hsp60, 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, PubMed:7912672). 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.

Goat Anti-CPN10 / HSPE1 Antibody (internal region) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Goat Anti-CPN10 / HSPE1 Antibody (internal region) - Images

AF4263a (0.01 µg/ml) staining of HepG2 lysate (35 µg protein in RIPA buffer). Primary incubation

was 1 hour. Detected by chemiluminescence.

Goat Anti-CPN10 / HSPE1 Antibody (internal region) - References

Macromolecular crowding extended to a heptameric system: the Co-chaperonin protein 10. Aguilar X, F Weise C, Sparrman T, Wolf-Watz M, Wittung-Stafshede P. Biochemistry 2011 Apr 50 (14): 3034-44.