

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

Purified Goat Polyclonal Antibody Catalog # AF4262a

## **Specification**

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

Application WB
Primary Accession P61604

Other Accession <u>15528(mouse)</u>, <u>NP 002148.1</u>

Reactivity Humar

Predicted Human, Mouse, Pig, Cow, 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)

#### **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-PEYGGTKVVLDDK, 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:<a

href="http://www.uniprot.org/citations/7912672" target="\_blank">7912672</a>, PubMed:<a href="http://www.uniprot.org/citations/1346131" target="\_blank">1346131</a>, PubMed:<a href="http://www.uniprot.org/citations/11422376" target="\_blank">11422376</a>). 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**

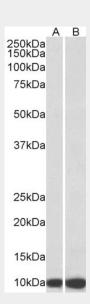
Mitochondrion matrix.

## 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 Cytomety
- Cell Culture

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

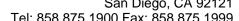


AF4262a (0.3  $\mu$ g/ml) staining of HeLa (A) and HepG2 (B) lysates (35  $\mu$ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

# 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.