

## Product datasheet for **TA384471**

### Cpn10 (HSPE1) Rabbit Monoclonal Antibody [Clone ID: R02-3K6]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	R02-3K6
Applications:	IHC, IP, WB
Recommended Dilution:	WB: 1/2000-1/10000 IHC: 1/50-1/200 IP: 1/20-1/50
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Monoclonal
Immunogen:	A synthetic peptide of human Cpn10
Formulation:	50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA
Concentration:	lot specific
Purification:	Affinity Purified
Conjugation:	Unconjugated
Storage:	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Stability:	1 year
Predicted Protein Size:	Calculated MW: 11 kDa; Observed MW: 11 kDa
Gene Name:	heat shock protein family E (Hsp10) member 1
Database Link:	<a href="#">Entrez Gene 3336 Human P61604</a>



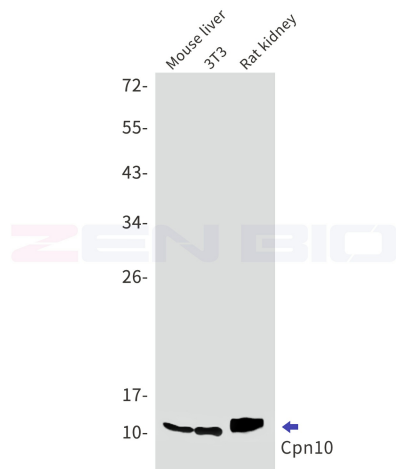
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**Background:**

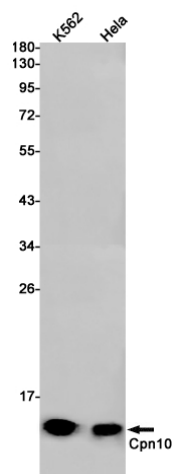
Swiss-Prot Acc.P61604.Co-chaperonin implicated in mitochondrial protein import and macromolecular assembly. Together with Hsp60, facilitates the correct folding of imported proteins. May also prevent misfolding and promote the refolding and proper assembly of unfolded polypeptides generated under stress conditions in the mitochondrial matrix (PubMed:7912672, PubMed:1346131, PubMed:11422376). 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).

**Synonyms:**

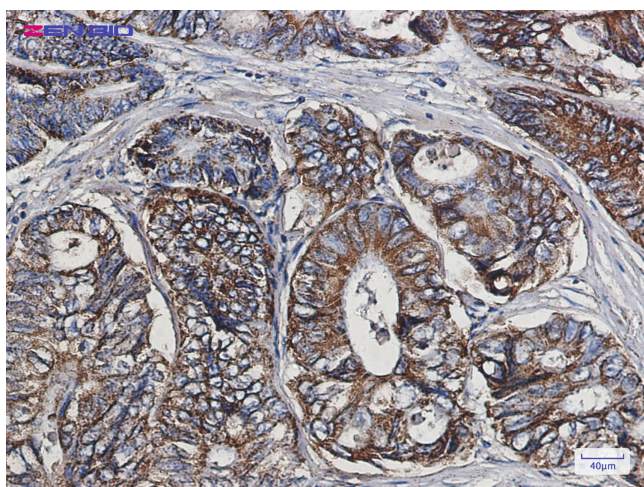
CPN10; EPF; GROES; Hsp10

**Product images:**

Western blot detection of Cpn10 in Mouse liver,3T3,Rat kidney lysates using Cpn10 antibody.Predicted band size:11kDa.Observed band size:11kDa.



Western blot detection of Cpn10 in K562, HeLa cell lysates using Cpn10 Rabbit mAb (1:1000 diluted). Predicted band size: 11 kDa. Observed band size: 11 kDa.



Immunohistochemistry of Cpn10 in paraffin-embedded Human colon cancer tissue using Cpn10 Rabbit mAb at dilution 1/50