

EPF Rabbit mAb

Catalog # AP75286

Product Information

Application	WB, IHC-P
Primary Accession	P61604
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	10932

Additional Information

Gene ID	3336
Other Names	HSPE1
Dilution	WB~~1:1000-1:5000 IHC-P~~N/A
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

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).

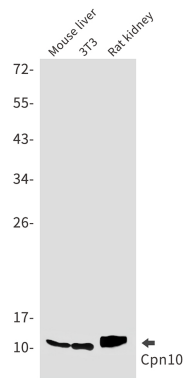
Cellular Location

Mitochondrion matrix.

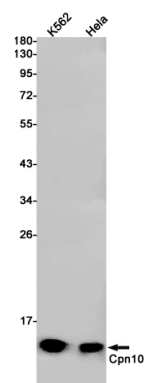
Background

Eukaryotic CPN10 homolog which is essential for mitochondrial protein biogenesis, together with CPN60. Binds to CPN60 in the presence of Mg-ATP and suppresses the ATPase activity of the latter.

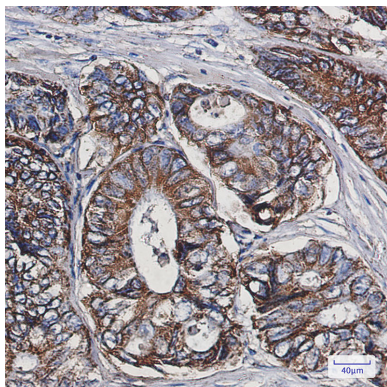
Images



Western blot analysis of Cpn10 in mouse liver, 3T3, rat kidney lysates using Cpn10 antibody.



Western blot analysis of Cpn10 in K562, HeLa lysates using Cpn10 antibody.



Immunohistochemistry analysis of paraffin-embedded Human colon cancer using Cpn10 antibody. High-pressure and temperature Sodium Citrate pH 6.0 was used for antigen retrieval.

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