

Rabbit HSP10 Polyclonal Antibody | anti-HSP10 antibody

HSP10 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA320828	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

HSP10; Polyclonal Antibody; HSP10 Antibody; 10 kDa chaperonin; 10 kDa heat shock protein mitochondrial; 10 kDa heat shock protein; mitochondrial; CH10_HUMAN; Chaperonin 10; Chaperonin 10 homolog; CPN10; cpn10 homolog; Early pregnancy factor; Early-pregnancy factor; EPF; GROES; GroES homolog; Heat shock 10kD protein 1 chaperonin 10; Heat shock 10kDa protein 1; Heat shock 10kDa protein 1 chaperonin 10; Heat-shock 10-kD protein; Hsp10; Hspe1; anti-HSP10 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	HSP10 antibody detects endogenous levels of total HSP10
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	102
Applicable Applications for anti-HSP10 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human HSP10
Subcellular Location	Mitochondrion Matrix.
Tissue Specificity	By stress.
Predicted Cross Reactivity	Pig, Zebrafish, Bovine, Horse, Rabbit, Chicken, Xenopus
Similarity	Pig (100%), Zebrafish (83%), Bovine (100%), Horse (100%), Rabbit (100%), Chicken (83%), Xenopus (94%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IF (Immunofluorescence)

AAA320828 staining HeLa cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) antibody, diluted at 1/600, was used as secondary antibody.



IHC (Immunohistochemistry)

AAA320828 at 1/100 staining human kidney tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



WB (Western Blot)

Western blot analysis on NIH-3T3 cell lysate using HSP10 Antibody, The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-HSP10 antibody

Description: HSPE1 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. Belongs to the groES chaperonin family. Induced by stress. Homohexamer.

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: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).

Subunit Structure: Homoheptamer arranged in a ring structure (PubMed:25918392). 2 heptameric Hsp10 rings interact with a Hsp60 tetradecamer in the structure of a back-to-back double heptameric ring to form the symmetrical football complex (PubMed:25918392).

Similarity: Belongs to the GroES chaperonin family.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4504523
NCBI GeneID	3336
NCBI Accession #	NP_002148.1
NCBI GenBank Nucleotide #	NM_002157.2
UniProt Accession #	P61604; O95421; Q04984; Q53X54; Q9UDH0
Molecular Weight	Observed: 10 kDa Predicted: 11 kDa
NCBI Official Full Name	10 kDa heat shock protein, mitochondrial
NCBI Official Synonym Full Names	heat shock protein family E (Hsp10) member 1
NCBI Official Symbol	HSPE1
NCBI Official Synonym Symbols	EPF; CPN10; GROES; HSP10

NCBI Protein Information	10 kDa heat shock protein, mitochondrial
UniProt Protein Name	10 kDa heat shock protein, mitochondrial
UniProt Gene Name	HSPE1
UniProt Synonym Gene Names	Hsp10; CPN10; EPF

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/hsp10-antibody-immunocytochemistry-immunofluorescence-immunohistochemistry-western-blot-elisa/320828>