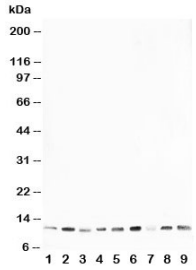
HSP10 Antibody / HSPE1 (R30887)

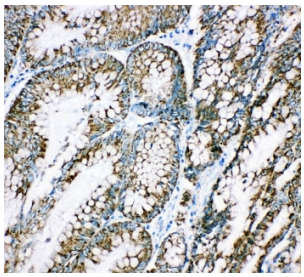
Catalog No.	Formulation	Size
R30887	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

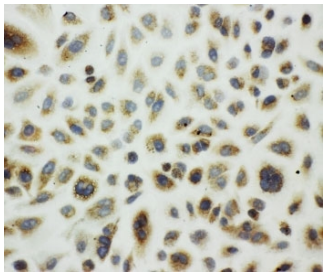
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide/thimerosal
UniProt	P61604
Localization	Cytoplasmic
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 0.5-1ug/ml Immunocytochemistry : 0.5-1ug/ml Immunofluorescence : 3-6ug/ml Flow Cytometry : 1-3ug/million cells
Limitations	This HSP10 antibody is available for research use only.



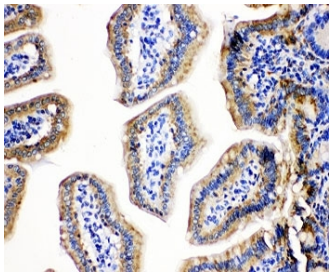
Western blot testing of HSP10 antibody and rat samples 1: thymus; 2: brain; 3: ovary; 4: testis; and human samples 5: A431; 6: A549; 7: MCF-7; 8: MM231; 9: HeLa cell lysate. Expected molecular weight: ~10 kDa.



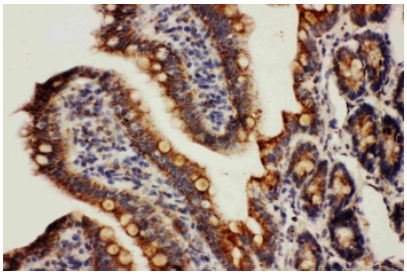
IHC-P: HSP10 antibody testing of human intestinal cancer tissue



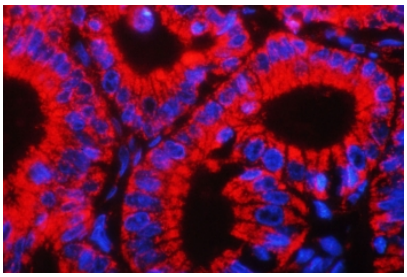
ICC testing of HSP10 antibody and A549 cells



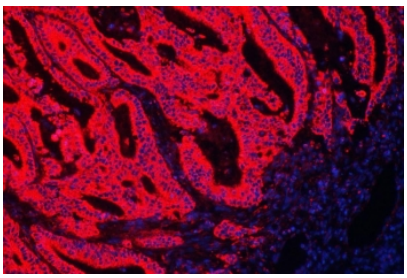
IHC-P: HSP10 antibody testing of mouse intestine tissue



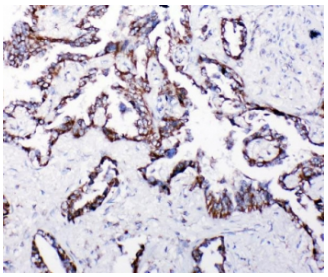
IHC staininging of FFPE rat intestinal tissue with HSP10 antibody at 1ug/ml. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min followed by cooling at RT for 20 min.



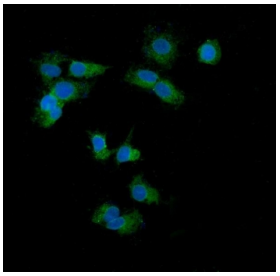
Immunofluorescent staining of FFPE human intestinal cancer with HSP10 antibody (red) and DAPI nuclear counterstain (blue). HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min followed by cooling at RT for 20 min.



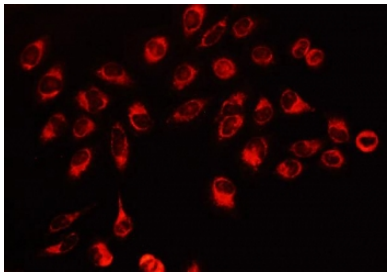
Immunofluorescent staining of FFPE human intestinal cancer with HSP10 antibody (red) and DAPI nuclear counterstain (blue). HIER: boil tissue sections in pH8 EDTA for 10-20 min followed by cooling at RT for 20 min.



IHC staining of FFPE human lung cancer with HSP10 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Immunofluorescent staining of FFPE human HepG2 cells with HSP10 antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Immunofluorescent staining of FFPE human HeLa cells with HSP10 antibody. HIER: steam section in pH6 citrate buffer for 20 min.

Description

Heat shock 10kDa protein 1, also called CPN10, GROES, and HSP10, is a protein that in humans is encoded by the HSPE1 gene. It is a heptameric ring of identical 10.4-kD subunits that binds to each end of GroEL to form a symmetric, functional heterodimer. The transcriptional activity of the promoter fragment in the HSP60 direction is approximately twice that in the HSP10 direction under normal growth conditions; upon heat shock, promoter activity in either direction increased by a factor of approximately 12. Mutational drifts performed in vitro with 4 different enzymes indicated the HSP10 overexpression doubled the number of accumulating mutations, and promoted the folding of enzyme variants carrying mutations in the protein core and/or mutations with higher destabilizing effects.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the HSP10 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

An amino acid sequence from the C-terminus of human Heat shock protein 10 (VVLDDKDYFLFRDGDILGKYVD) was used as the immunogen for this HSP10 antibody.

Storage

After reconstitution, the HSP10 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.