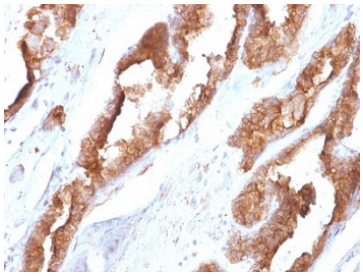
HSP27 Antibody [clone CPTC-HSPB1-2] (V7422)

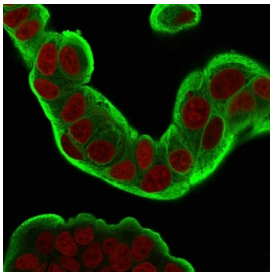
Catalog No.	Formulation	Size
V7422-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7422-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7422SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V7422IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

Bulk quote request

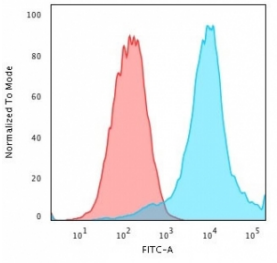
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	CPTC-HSPB1-2
Purity	Protein G affinity chromatography
UniProt	P04792
Localization	Predominantly cytoplasmic with some nuclear
Applications	Flow Cytometry : 1-2ug/10^6 cells Immunofluorescence : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT Western Blot : 1-2ug/ml
Limitations	This HSP27 antibody is available for research use only.



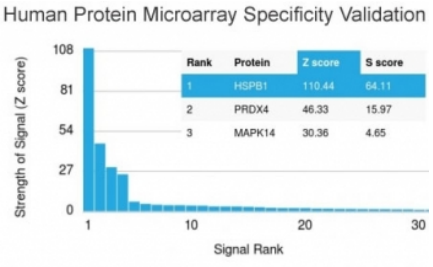
IHC staining of FFPE human prostate tissue with HSP27 antibody (clone CPTC-HSPB1-2). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min and allow to cool before testing.



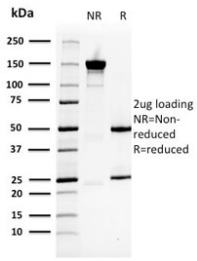
Immunofluorescent staining of PFA-fixed human MCF7 cells with HSP27 antibody (clone CPTC-HSPB1-2, green) and Reddot nuclear stain (red).



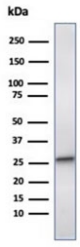
Flow cytometry testing of PFA-fixed human MCF7 cells with HSP27 antibody (clone CPTC-HSPB1-2); Red=isotype control, Blue= HSP27 antibody.



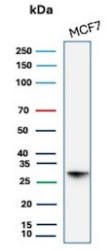
Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using HSP27 antibody (clone CPTC-HSPB1-2). These results demonstrate the foremost specificity of the CPTC-HSPB1-2 mAb.
Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



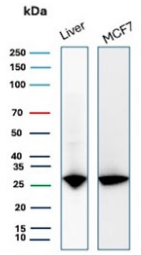
SDS-PAGE analysis of purified, BSA-free HSP27 antibody (clone CPTC-HSPB1-2) as confirmation of integrity and purity.



Western blot testing of human liver tissue lysate with HSP27 antibody (clone CPTC-HSPB1-2). Predicted molecular weight: 23-27 kDa.



Western blot testing of human MCF7 cell lysate with HSP27 antibody (clone CPTC-HSPB1-2). Predicted molecular weight: 23-27 kDa.



Western blot testing of human liver and MCF7 cell lysate with HSP27 antibody (clone CPTC-HSPB1-2). Predicted molecular weight: 23-27 kDa.

Description

HSP27, also referred to as the Estrogen-Regulated 24K protein and HSP28, is one of several small heat shock proteins produced by all organisms studied. HSP27 synthesis is induced by elevated temperature, as well as by estrogen in hormone responsive cells. Interestingly, human HSP27 also shares greater than 50% homology with low molecular weight Drosophila HSPs and mammalian -crystalline lens protein. Because of the estrogen responsive nature of HSP27, this protein has been studied extensively in human estrogen responsive tissues such as cervix, endometrium and breast tissue. Therefore, HSP27 may be useful in classifying various hormone sensitive tumors.

Application Notes

Optimal dilution of the HSP27 antibody should be determined by the researcher.

1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Full length recombinant human protein was used as the immunogen for the HSP27 antibody.

Storage

Store the HSP27 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).