

36-2505: Anti-Heat Shock 27kDa Protein 1 Monoclonal Antibody(Clone: CPTC-HSPB1-2)

Clonality :	Monoclonal
Clone Name :	CPTC-HSPB1-2
Application :	FACS,IF,WB,IHC
Reactivity :	Human
Gene :	HSPB1
Gene ID :	3315
Uniprot ID :	P04792
Alternative Name :	Heat shock 27kDa protein, Estrogen-regulated 24kDa protein, Heat shock 25kDa protein 1, Heat shock 28kDa protein 1, Heat shock protein beta-1, HMN2B, Hsp25, Hsp28, HspB1, Stress-responsive protein 27 (SRP27)
Isotype :	Mouse IgG1, kappa
Immunogen Information :	Recombinant human full-length protein

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.

Product Info

Amount :	20 µg / 100 µg
Content :	200 µg/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Storage condition :	Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous.

Application Note

Flow Cytometry (1-2ug/million cells); Immunofluorescence (1-2ug/ml); Western Blot (1-2ug/ml); ,Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 minutes at RT),(Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95 °C followed by cooling at RT for 20 minutes),

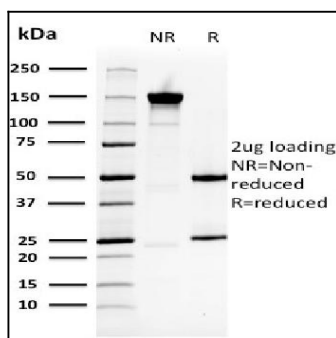


Fig. 1: SDS-PAGE Analysis Purified HSP27 Mouse Monoclonal Antibody (CPTC-HSPB1-2). Confirmation of Purity and Integrity of Antibody

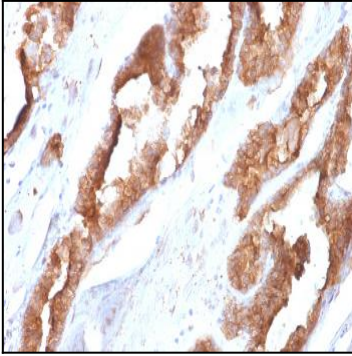


Fig. 2: Formalin-fixed, paraffin-embedded human Prostate stained with HSP27 Mouse Monoclonal Antibody (CPTC-HSPB1-2).

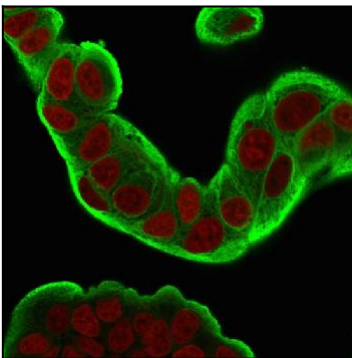


Fig. 3: Immunofluorescence Analysis of PFA-fixed MCF-7 cells labeling HSP27 with HSP27 Mouse Monoclonal Antibody (CPTC-HSPB1-2) followed by Goat anti-Mouse IgG-CF488 (Green). The nuclear counterstain is Reddot (Red)

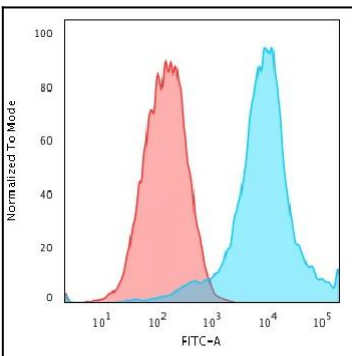


Fig. 4: Flow Cytometric Analysis of PFA-fixed MCF-7 cells using HSP27 Mouse Monoclonal Antibody (CPTC-HSPB1-2) followed by Goat anti-Mouse IgG-CF488 (Blue); Isotype Control (Red).

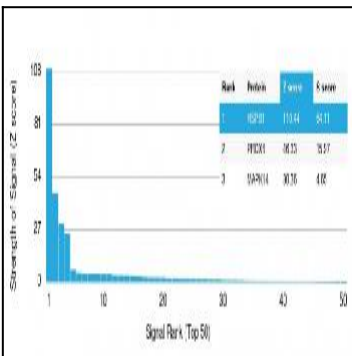


Fig. 5: Analysis of Protein Array containing more than 19,000 full-length human proteins using HSP27 Mouse Monoclonal Antibody (CPTC-HSPB1-2). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to be specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.