

## Heat Shock 27kDa Protein 1 Antibody

Mouse Monoclonal Antibody [Clone CPTC-HSPB1-2]

Catalog No	Format	Size
3315-MSM3-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
3315-MSM3-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
3315-MSM3-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

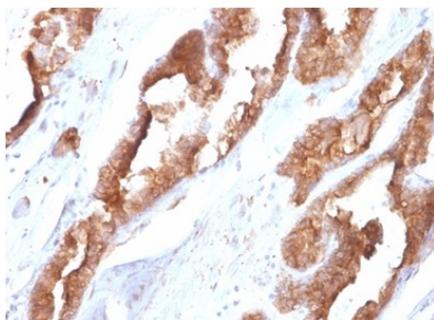
Applications	Tested Dillution	Note
Flow Cytometry (Flow)	1-2ug/million cells	
Immunofluorescence (IF)	1-3ug/ml	
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes
Western Blot (WB)	2-4ug/ml	

### Product Details

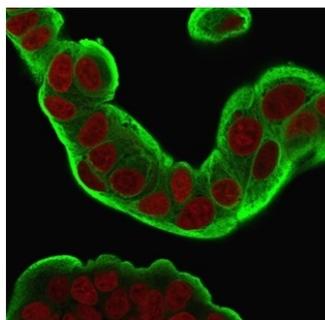
<b>Clone</b>	CPTC-HSPB1-2
<b>Gene Name</b>	HSPB1
<b>Immunogen</b>	Recombinant human full-lengthprotein
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Isotype / Light Chain</b>	IgG1 / Kappa
<b>Mol. Weight of Antigen</b>	27kDa
<b>Cellular Localization</b>	Cytoplasm, Cytoskeleton, Nucleus, Spindle
<b>Species Reactivity</b>	Human
<b>Positive Control</b>	MCF-7, HeLa cells or Human Liver

\*Optimal dilution for a specific application should be determined.

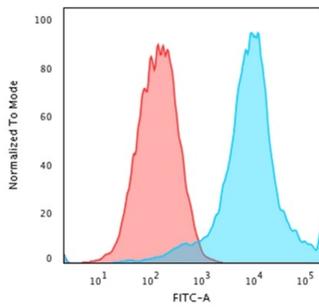
### Product Images for Heat Shock 27kDa Protein 1 Antibody



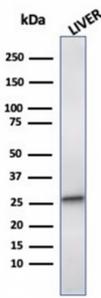
Formalin-fixed, paraffin-embedded human prostate stained with HSP27 Mouse Monoclonal Antibody (CPTC-HSPB1-2).



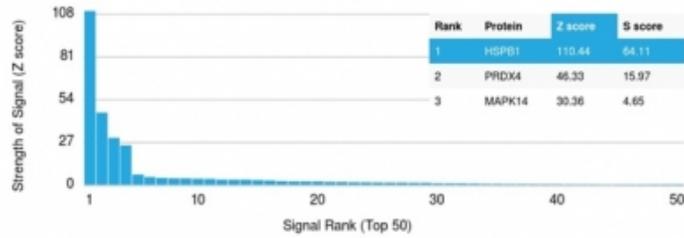
Immunofluorescence analysis of PFA-fixed MCF-7 cells using HSP27 Mouse Monoclonal Antibody (CPTC-HSPB1-2) followed bygoat anti-mouse IgG-CF488 (green). Nuclei stained with RedDot.



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).

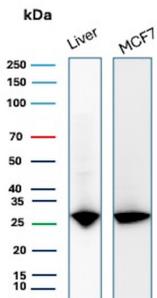


Western blot analysis of human liver tissue lysate using HSP27 Mouse Monoclonal Antibody (CPTC-HSPB1-2).

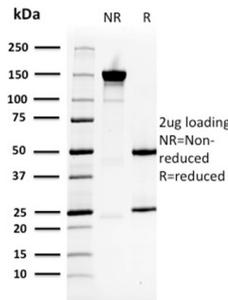


Western blot analysis of MCF7 lysate using HSP27 Mouse Monoclonal Antibody (CPTC-HSPB1-2).

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.



Western Blot Analysis of Liver and MCF7 lysates using HSP27 Mouse Monoclonal Antibody (CPTC-HSPB1-2).



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

**Specificity & Comments**

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  $\gamma$ -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.

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**Limitations and Warranty**

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

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**Supplied As**

200ug/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.

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**Storage and Stability**

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. No MSDS required.

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**Research Areas**

BBB VCAM-1 Signaling, MAPK Signaling, Ovarian Cancer, Signal Transduction

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