

HSP27 (Heat Shock Protein 27) Antibody

Mouse Monoclonal Antibody [Clone G3.1]

Catalog No	Format	Size
3315-MSM1-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
3315-MSM1-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
3315-MSM1-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

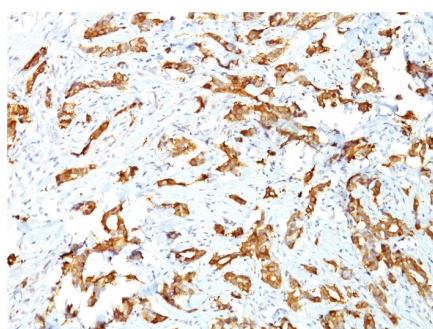
Applications	Tested Dillution	Note
Flow Cytometry (Flow)	1-2ug/million cells	
Immunofluorescence (IF)	1-3ug/ml	
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling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

Product Details

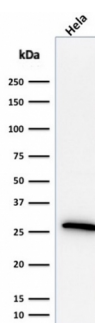
Clone	G3.1
Gene Name	HSPB1
Immunogen	Partially purified hsp27 (earlier called 24K) protein from breast cancer MCF-7 cells.
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG1 / Kappa
Mol. Weight of Antigen	27kDa
Cellular Localization	Cytoplasm, Cytoskeleton, Nucleus, Spindle
Species Reactivity	Chicken, Chimpanzee, Human, Monkey, Mouse, Rat, Sheep
Positive Control	especially those that are positive for ER and/or PgR., MCF-7 or HeLa cells. ~50% of breast carcinomas are positive for hsp27

*Optimal dilution for a specific application should be determined.

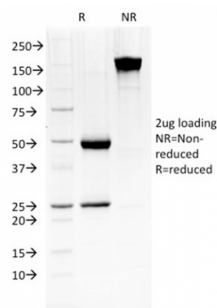
Product Images for HSP27 (Heat Shock Protein 27) Antibody



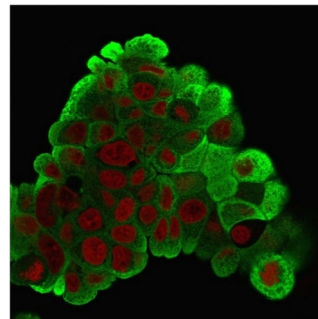
Formalin-fixed, paraffin-embedded human breast carcinoma stained with HSP27 Mouse Monoclonal Antibody (G3.1).



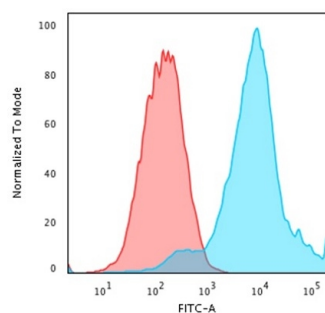
Western Blot Analysis of HeLa cell lysate using HSP27 Mouse Monoclonal Antibody (G3.1).



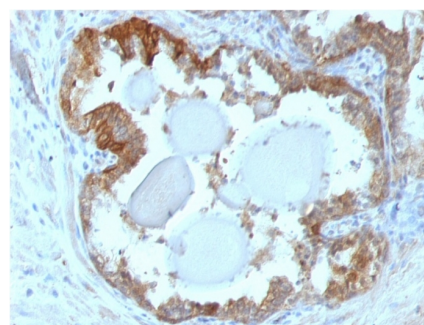
SDS-PAGE Analysis Purified HSP27 Mouse Monoclonal Antibody (G3.1). Confirmation of Integrity and Purity of Antibody



Immunofluorescence Analysis of PFA-fixed MCF-7 cells labeling HSP27 with HSP27 Mouse Monoclonal Antibody (G3.1) followed by goat anti-mouse IgG-CF488 (green). Nuclear counterstain is RedDot.



Flow Cytometric Analysis of PFA-fixed MCF-7 cells using HSP27 Mouse Monoclonal Antibody (G3.1) followed by goat anti-mouse IgG-CF488 (blue); isotype control (red).



Formalin-fixed, paraffin-embedded human prostate carcinoma stained with HSP27 Mouse Monoclonal Antibody (G3.1).

Specificity & Comments

MAB G3.1 reacts specifically with heat shock protein HSP27 in human and monkey tissues and cell lines such as MCF-7. 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 alpha-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.

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.

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 at 1.0mg/ml.

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.

Research Areas

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