



Cat nr AE00228

Product Datasheet

Mouse Monoclonal Antibody, clone CPTC-HSPB1-2 to:

HSP27

Heat Shock Protein family B (small) member 1; Heat shock protein beta-1; 28 kDa heat shock protein; Estrogen-regulated 24 kDa protein; Heat shock 27 kDa protein; Stress-Responsive Protein 27; CMT2F; HMN2B; HSP27; HSP 27; HSP28; Hsp25; HSPB1; SRP27; HS.76067; HEL-S-102

Cellular localization Plasma membrane, cell surface, cytoskeleton

Official Symbol (Gene) HSPB1
 GeneID 3315
 SwissProt P04792

Confirmed Applications ICC, IHC, PA
 Positive controls prostate, MCF7
 Customers positive feedback
 Aeonian Rating© 80

Purification By Protein G from bioreactor concentrate
 Formulation 200ug IgG/ml in PBS, 0.05% BSA, 0.05% azide (20ug or 100ug)
 1mg IgG/ml in PBS (100ug or contact us for quotation)
 Amount 20ug 100ug
 Isotype Mouse IgG1, kappa
 Confirmed species reactivity Human
 Immunogen Recombinant human full-length HSP27 protein

Epitope Unknown

Storage instructions Avoid repeated freeze/thaw cycles. For long term storage, keep small aliquots at -20C or -80C and keep one aliquot at 4C for daily experimentations. Azide will preserve antibody at 4C for 6-12 months, when kept away from direct sun light.

Expiration Integrity warranted for 24 months after purchase when handled and stored according to instructions, see below.

Warranty This product is only warranted for the specifications as described in this product sheet and only when the product is handled and stored according to instructions. User should validate this antibody in the application and tissue/cell type as required, after confirmation of integrity upon receipt is obtained by reproducing the performance as described below. Should such confirmation not be attempted, any warranty is void. In case of non-conformance, user needs to contact us immediately for replacement or refund.

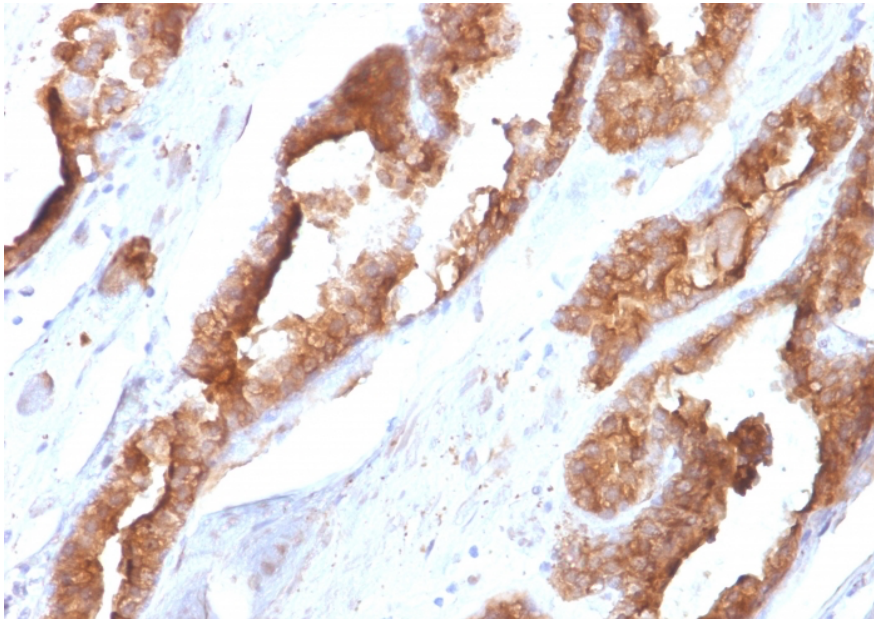
Liability This product is for in vitro research use only. Any other applications, such as diagnostics or therapeutics, or in vivo experiments, and the validation of this product therein, are solely at the responsibility of the buyer/user.

Product performance see next pages

Product data:

ImmunoHistoChemistry (IHC):

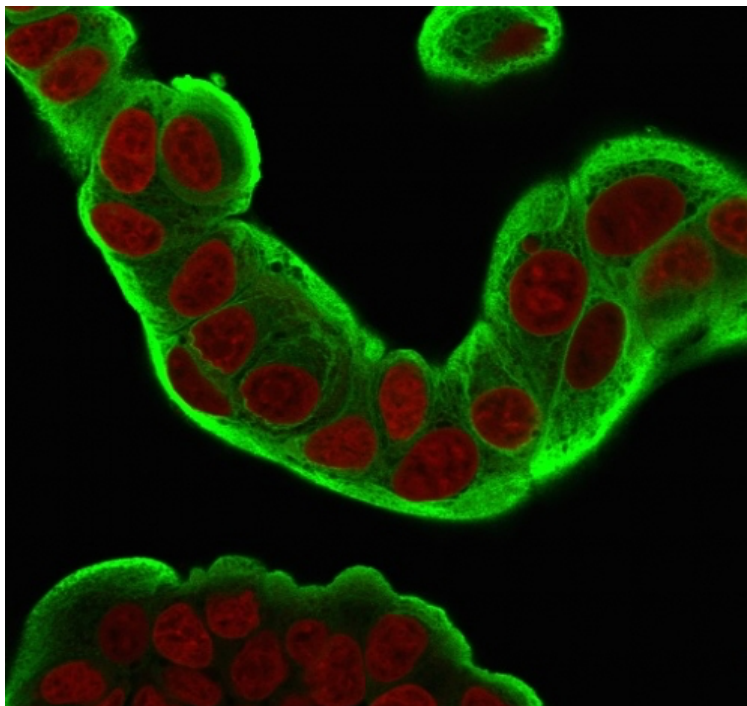
This product shows staining of epithelial cells in human prostate sections. Recommended concentration: 1-3ug/ml



Formaldehyde-fixed, paraffin-embedded human prostate stained with HSP27 Mouse Monoclonal Antibody AE00228 at 1-2ug/ml for 30 minutes at RT. Epitope retrieval: boiling at pH6 for 10-20 min followed by 20 min cooling. DAB staining by HRP polymer.

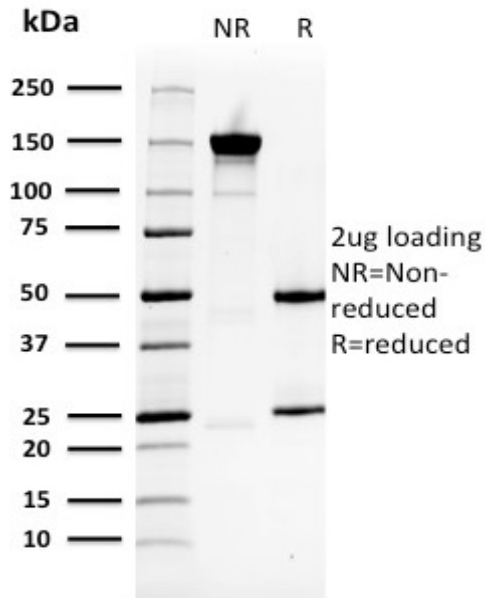
ImmunoCytoChemistry (ICC):

This product was successfully used to stain cytoplasmic features in cell line MCF7. Recommended concentration: 1-3ug/ml



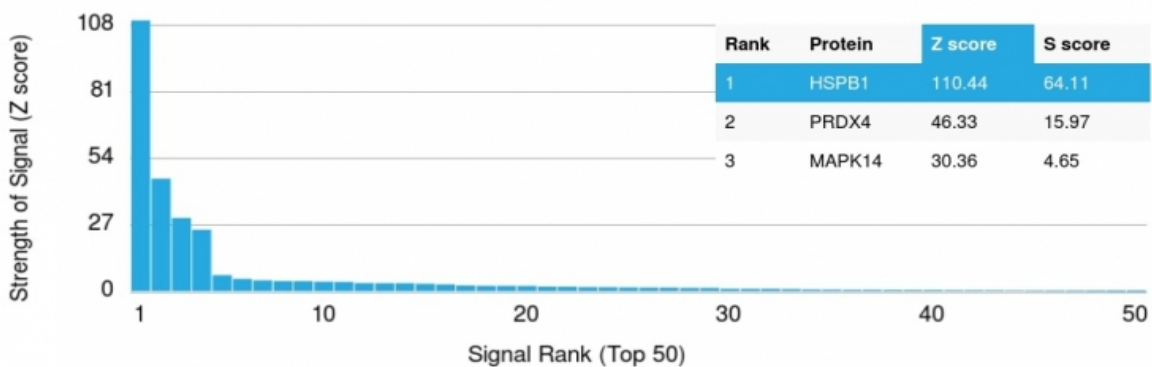
Confocal microscopy of cell line MCF7 stained with HSP27 Mouse Monoclonal Antibody AE00228 at 1-2ug/ml for 30 minutes at RT. CF488 (green) staining for the antibody and RedDot (red) for nuclear staining.

SDS-PAGE Analysis of Purified HSP27 Mouse Monoclonal Antibody AE00228. Confirmation of Purity and Integrity of Antibody.



Integrity of the purified antibody AE00228 under non-reduced and reduced conditions, showing intact IgG at around 150kDa (NR) and intact heavy and light chains at 50kDa and 25kDa resp. (R).

Specificity and selectivity of AE00228 to HSP27 were tested against >19,000 full-length human proteins on a human protein array. A protein BLAST search of the antigen region against H. sapiens revealed no closely related other proteins.



Cross-reactivity assessment of HSP27 Mouse Monoclonal Antibody AE00228 (1ug/ml) on CDI's Protein Array containing more than 19,000 full-length human proteins.

The Z-score represents the strength of a signal that an antibody (through a fluorophore-tagged secondary reagent) produces when binding to a particular protein on the array. Z-scores are in units of standard deviations (SD's) above the mean value of all signals generated on that array. When Z-scores are arranged in descending order, the difference between two successive values will be the S-score for the first. Thus, the S-score represents the relative specificity of the antibody to its intended target. An antibody is considered specific to its intended target, when it has an S-score of at least 2.5. For example, if an antibody binds to intended protein X with a Z-score of 43 and to the cross-reacting protein Y with a next Z-score of 14, then the S-score for the antibody to intended target X equals 29 (43-14).