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## HSP27 Antibody



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<b>Applications:</b> WB, FC-FP	<b>Reactivity:</b> M R	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 27	<b>Source:</b> Rabbit	<b>UniProt ID:</b> #P14602	<b>Entrez-Gene Id:</b> 15507
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<b>Product Usage Information</b>	<b>Application</b> Western Blotting Flow Cytometry (Fixed/Permeabilized)	<b>Dilution</b> 1:1000 1:25
<b>Storage</b>	Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. Do not aliquot the antibody.	
<b>Specificity / Sensitivity</b>	HSP27 Antibody detects endogenous levels of total HSP27 protein. The antibody does not cross-react with other heat shock proteins.	
<b>Source / Purification</b>	Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to rat HSP27. Antibodies are purified by protein A and peptide affinity chromatography.	
<b>Background</b>	Heat shock protein (HSP) 27 is one of the small HSPs that are constitutively expressed at different levels in various cell types and tissues. Like other small HSPs, HSP27 is regulated at both the transcriptional and posttranslational levels (1). In response to stress, the HSP27 expression increases several-fold to confer cellular resistance to the adverse environmental change. HSP27 is phosphorylated at Ser15, Ser78, and Ser82 by MAPKAPK-2 as a result of the activation of the p38 MAP kinase pathway (2,3). Phosphorylation of HSP27 causes a change in its tertiary structure, which shifts from large homotypic multimers to dimers and monomers (4). It has been shown that phosphorylation and increased concentration of HSP27 modulates actin polymerization and reorganization (5,6).	
<b>Background References</b>	1. Stetler, R.A. et al. (2009) <i>Curr Mol Med</i> 9, 863-72. 2. Landry, J. et al. (1992) <i>J Biol Chem</i> 267, 794-803. 3. Rouse, J. et al. (1994) <i>Cell</i> 78, 1027-37. 4. Rogalla, T. et al. (1999) <i>J Biol Chem</i> 274, 18947-56. 5. Lavoie, J.N. et al. (1993) <i>J Biol Chem</i> 268, 24210-4. 6. Rousseau, S. et al. (1997) <i>Oncogene</i> 15, 2169-77.	

<b>Species Reactivity</b>	Species reactivity is determined by testing in at least one approved application (e.g., western blot).
<b>Western Blot Buffer</b>	IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.
<b>Applications Key</b>	<b>WB:</b> Western Blotting <b>FC-FP:</b> Flow Cytometry (Fixed/Permeabilized)
<b>Cross-Reactivity Key</b>	<b>H:</b> human <b>M:</b> mouse <b>R:</b> rat <b>Hm:</b> hamster <b>Mk:</b> monkey <b>Vir:</b> virus <b>Mi:</b> mink <b>C:</b> chicken <b>Dm:</b> D. melanogaster <b>X:</b> Xenopus <b>Z:</b> zebrafish <b>B:</b> bovine <b>Dg:</b> dog <b>Pg:</b> pig <b>Sc:</b> S. cerevisiae <b>Ce:</b> C. elegans <b>Hr:</b> horse <b>GP:</b> Guinea Pig <b>Rab:</b> rabbit <b>All:</b> all species expected
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