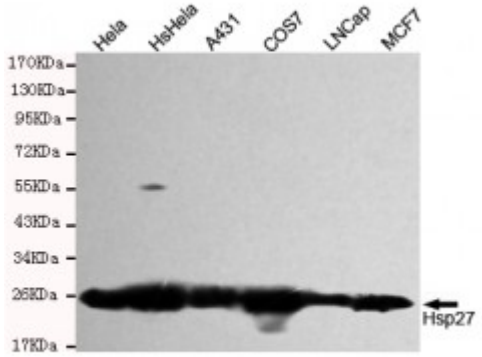
Anti-Hsp27 antibody



Description	Mouse monoclonal to Hsp27.

Model	STJ99170
Host	Mouse
Reactivity	Human, Simian
Applications	ELISA, WB
Immunogen	Purified recombinant human Hsp27 protein fragments expressed in E.coli.
Gene ID	3315
Gene Symbol	HSPB1
Dilution range	WB 1:500-2000ELISA 1:10000-20000
Specificity	This antibody detects endogenous levels of Hsp27 and does not cross-react with related proteins.
Tissue Specificity	Detected in all tissues tested: skeletal muscle, heart, aorta, large intestine, small intestine, stomach, esophagus, bladder, adrenal gland, thyroid, pancreas, testis, adipose tissue, kidney, liver, spleen, cerebral cortex, blood serum and cerebrospinal fluid. Highest levels are found in the heart and in tissues composed of striated and smooth muscle.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Clone ID	7E5-1F9-D9
Note	For Research Use Only (RUO).
Protein Name	Heat shock protein beta-1 HspB1 28 kDa heat shock protein Estrogen-

	regulated 24 kDa protein Heat shock 27 kDa protein HSP 27 Stress-responsive protein 27 SRP27
Molecular Weight	27kDa
Clonality	Monoclonal
Conjugation	Unconjugated
Isotype	IgG1
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:5246OMIM:602195
Alternative Names	Heat shock protein beta-1 HspB1 28 kDa heat shock protein Estrogen-regulated 24 kDa protein Heat shock 27 kDa protein HSP 27 Stress-responsive protein 27 SRP27
Function	Small heat shock protein which functions as a molecular chaperone probably maintaining denatured proteins in a folding-competent state . Plays a role in stress resistance and actin organization . Through its molecular chaperone activity may regulate numerous biological processes including the phosphorylation and the axonal transport of neurofilament proteins .
Cellular Localization	Cytoplasm Nucleus Cytoplasm, cytoskeleton, spindle. Cytoplasmic in interphase cells. Colocalizes with mitotic spindles in mitotic cells. Translocates to the nucleus during heat shock and resides in sub-nuclear structures known as SC35 speckles or nuclear splicing speckles.
Post-translational Modifications	Phosphorylated upon exposure to protein kinase C activators and heat shock . Phosphorylation by MAPKAPK2 and MAPKAPK3 in response to stress dissociates HSPB1 from large small heat-shock protein (sHsps) oligomers and impairs its chaperone activity and ability to protect against oxidative stress effectively. Phosphorylation by MAPKAPK5 in response to PKA stimulation induces F-actin rearrangement .