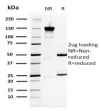
Heat Shock 27kDa Protein 1 (HPS27) Monoclonal Mouse Antibody (CPTC-HSPB1-2)



Product Description

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 -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. Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the CF® Dye Brochure for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.
Stock status: Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email order@biotium.com to inquire about stock status and lead times before placing your order.

Product attributes

Antibody number	#2244
Antibody reactivity (target)	Heat Shock 27kDa Protein 1
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	CPTC-HSPB1-2
Isotype	IgG1, kappa
Molecular weight	27 kDa
Synonyms	Heat shock 27kDa protein; Estrogen-regulated 24kDa protein; Heat shock 25kDa protein 1; Heat shock 28kDa protein 1; Heat shock protein beta-1; HMN2B; Hsp25; Hsp28; HspB1; Stress-responsive protein 27 (SRP27)
Human gene symbol	HSPB1
Entrez gene ID	3315
SwissProt	P04792
Unigene	520973
Immunogen	Recombinant human full-length protein
Verified antibody applications	Flow (intracellular) (verified), IHC (FFPE) (verified), WB (verified)
Antibody target cellular localization	Nucleus & cytoplasm
Species reactivity	Human
Positive control	MCF-7, HeLa cells; ~50% of Breast Carcinomas are positive for hsp27 especially those that are also positive for ER and/or PgR.
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Validated in protein array	Monospecific
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Tumor expression	Breast cancer

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	CF®405S Features
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

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