

Product datasheet for **TA302047S**

HSP27 (HSPB1) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB: 1:1000, IHC: 1:10~50
Reactivity:	Human
Host:	Rabbit
Isotype:	Ig
Clonality:	Polyclonal
Immunogen:	This HSP27(HSPB1) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 56-85 amino acids from human HSP27(HSPB1).
Formulation:	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.
Concentration:	lot specific
Purification:	This antibody is purified through a protein A column, followed by peptide affinity purification.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	22783 Da
Gene Name:	heat shock protein family B (small) member 1
Database Link:	NP_001531 Entrez Gene 3315 Human P04792

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Background:

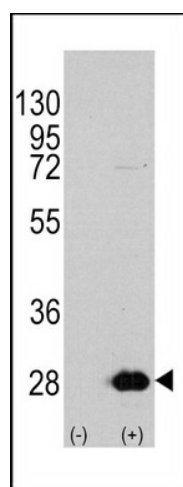
In response to adverse changes in their environment, cells from many organisms increase the expression of a class of proteins referred to as heat shock or stress proteins. HSPB1 exhibits rapid increased phosphorylation in response to various mitogens, tumor promoters (e.g. phorbol esters) and calcium ionophores, and high levels are associated with carcinoma of the breast and with endometrial adenocarcinomas. Heat shock of HeLa cell cultures, or treatment with arsenite, phorbol ester, or tumor necrosis factor, causes a rapid phosphorylation of preexisting HSPB1, with Ser82 as the major site and Ser78 the minor site of phosphorylation. HSPB1 may exert phosphorylation-activated functions linked with growth signaling pathways in unstressed cells. A homeostatic function at this level could protect cells from adverse effects of signal transduction systems which may be activated inappropriately during stress.

Synonyms:

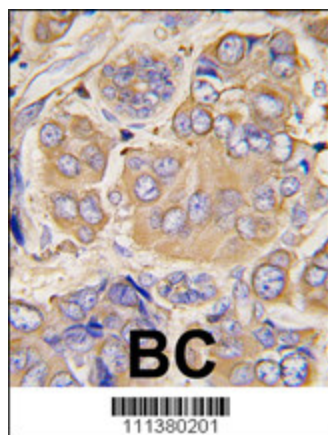
CMT2F; HEL-S-102; HMN2B; HS.76067; Hsp25; HSP27; HSP28; SRP27

Protein Pathways:

MAPK signaling pathway, VEGF signaling pathway

Product images:


Western blot analysis of HSPB1 (arrow) using rabbit polyclonal HSPB1 Antibody (S78) (RB11380). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the HSPB1 gene (Lane 2) (Origene Technologies).



Formalin-fixed and paraffin-embedded human breast carcinoma tissue reacted with HSPB1 Antibody (S78) (Cat.#[TA302047]), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.