

Product datasheet for **AP23333PU-N**

HSP27 (HSPB1) (C-term) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	Western blot: At 1 µg/ml with the appropriate system to detect HSP27 in cells and tissues. Immunohistochemistry on paraffin sections: At 1-2 µg/ml to detect HSP27 in formalin fixed and paraffin embedded tissues.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Synthetic peptide corresponding to a sequence at the C-terminal of human HSP27
Specificity:	This antibody detects HSPB1 / HSP27 (C-term).
Formulation:	50% glycerol, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ State: Aff - Purified State: Lyophilized Ig fraction
Reconstitution Method:	1.2% sodium acetate or neutral PBS. If 0.5ml of PBS is used, the antibody concentration will be 100 µg/ml.
Purification:	Immunogen affinity purified
Conjugation:	Unconjugated
Storage:	Store at 2 - 8 °C for up to one month or (in aliquots) at -20 °C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	heat shock protein family B (small) member 1
Database Link:	Entrez Gene 15507 Mouse Entrez Gene 24471 Rat Entrez Gene 3315 Human P04792



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Background:

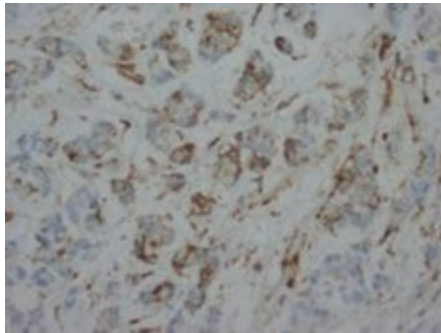
The heat-shock proteins (HSPs) belong to a larger group of polypeptides, the stress proteins, that are induced in various combinations in response to environmental challenges and developmental transitions. Synthesis of the small (27-kD) HSP has been shown to be correlated with the acquisition of thermotolerance. The deduced 199-amino acid HSP27 protein shows sequence similarity to mammalian alpha-crystallins. Approximately 20% of its residues are susceptible to phosphorylation. The HSP27 gene, which is mapped to 7q11.23 and has 3 exons¹, produced a 2.2-kb transcript in an in vitro transcription assay. Decreasing ROS in cells expressing mutant huntingtin, HSP27 protects cells against oxidative stress. In other words, HSP27 is a suppressor of polyglutamine (polyQ)-mediated cell death. Furthermore, MAPKAPK5 is a major stress-activated kinase that can phosphorylate HSP27 in vitro.

Synonyms:

Heat shock protein beta-1, Heat shock 27 kDa protein, HSP28, 28 kDa heat shock protein, SRP27, HSP25

Protein Pathways:

MAPK signaling pathway, VEGF signaling pathway

Product images:

HSP27 Polyclonal Antibody