

## Product datasheet for **AP02500PU-N**

### HSP27 (HSPB1) pSer78 Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	<b>Western Blot:</b> 1/500 - 1/1000; Incubate membrane with diluted antibody in 5% nonfat milk, 1X TBS, 0,1% Tween-20 at 4°C with gentle shaking, overnight. <b>Immunohistochemistry on paraffin sections:</b> 1/50 - 1/100. <b>Immunofluorescence:</b> 1/100 - 1/200.
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Synthetic phosphopeptide derived from human HSP27 around the phosphorylation site of serine 78 (A-L-SP-R-Q).
Specificity:	HSP27 antibody detects endogenous levels of HSP27 only when phosphorylated at serine 78.
Formulation:	PBS(without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH 7.4 containing 150mM NaCl, 0.02% sodium azide and 50% glycerol State: Aff - Purified State: Liquid purified IgG fraction
Concentration:	lot specific
Purification:	Affinity chromatography
Conjugation:	Unconjugated
Storage:	Store the antibody at -20°C. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	heat shock protein family B (small) member 1
Database Link:	<a href="#">Entrez Gene 3315 Human P04792</a>



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**Background:**

Hsp27, also referred to as the Estrogen regulated 24K protein and HSP28, is one of several small heat shock proteins (HSP) produced by all organisms studied. Hsp27 synthesis is induced by elevated temperature, as well as estrogen in hormone responsive cells. This protein is involved in stress resistance and actin organization. Interestingly, human HSP27 also shares greater than 50% homology with low molecular weight *Drosophila* HSP's and mammalian  $\alpha$ -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. This work has led to the suggestion that Hsp27 may be a useful marker in classifying various hormone sensitive tumors.

**Synonyms:**

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

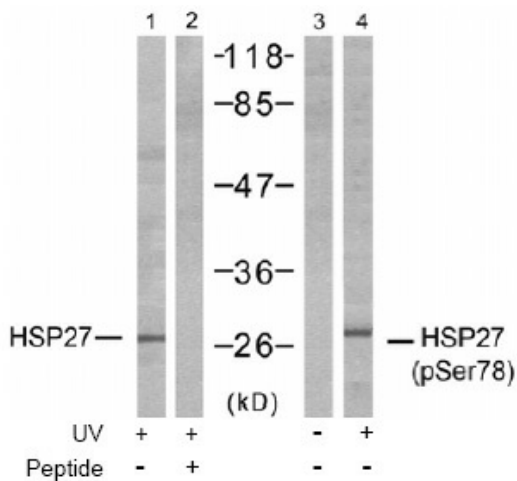
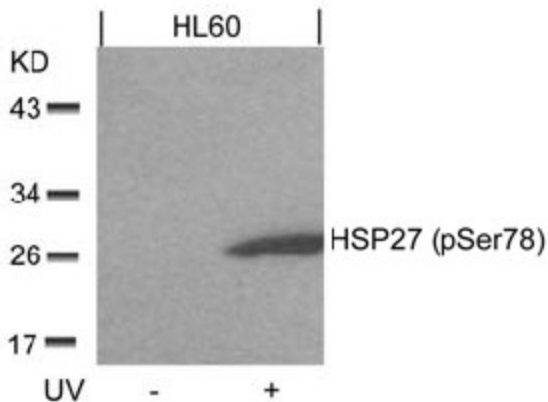
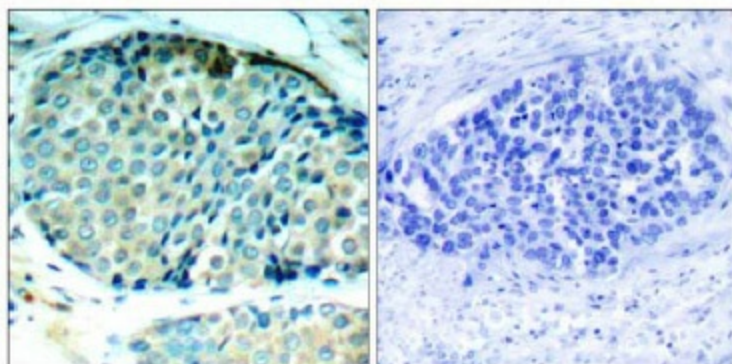
**Product images:**


Figure 4 Western blot analysis of extracts from HL60 cells untreated or treated with UV using HSP27 (pSer78) antibody



Western blot analysis of extracts from HeLa cells using HSP27 antibody (Lane 1 and 2) and HSP27 (pSer78) antibody (Lane 3 and 4).



P-Peptide

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Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue, using HSP27 antibody.

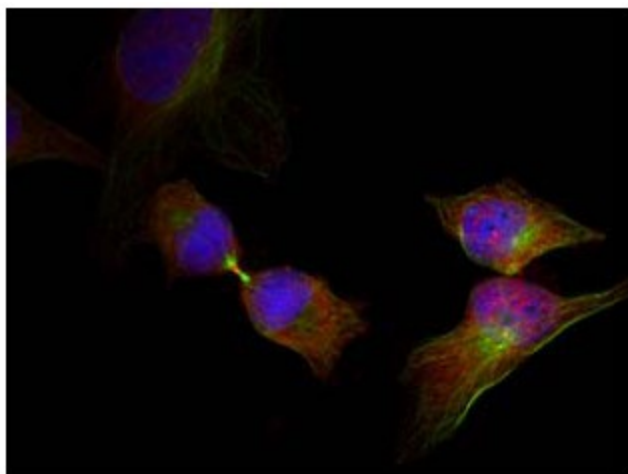


Figure 3 Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic, nuclear, centrosomal, midbody staining using HSP27 (pSer78) antibody