

## Product datasheet for **AM09016PU-S**

### **HSP27 (HSPB1) Mouse Monoclonal Antibody [Clone ID: 2A5]**

#### **Product data:**

Product Type:	Primary Antibodies
Clone Name:	2A5
Applications:	ELISA, IHC, WB
Recommended Dilution:	ELISA. Western blot (1:1,000 - 1:2,000). Immunohistochemistry on Parffin embedded tissue (1:50).
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Recombinant human Hsp27 (1-205 aa) purified from E. coli
Specificity:	The antibody recognizes human Hsp27. Other species not tested.
Formulation:	PBS, pH 7.4 containing 0.02% Sodium Azide and 10% Glycerol State: Purified State: Liquid purified Ig fraction
Concentration:	lot specific
Purification:	Protein-G affinity chromatography
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for up to two weeks 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:	<a href="#">Entrez Gene 3315 Human P04792</a>



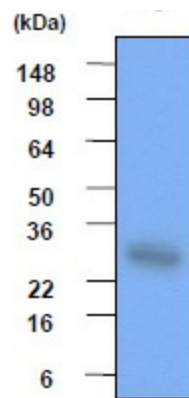
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**Background:**

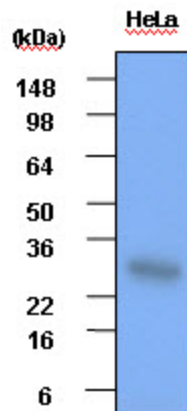
Hsp27 (also known as the Estrogen-Regulated 24K protein, and hsp 28) is a member of the mammalian small heat shock protein family. Hsp27 is expressed constitutively in many tissues and its expression is increased to high levels after various types of stress including elevated temperatures, toxic metals, drugs and oxidants. Also, Hsp27 is phosphorylated in vivo on three phosphorylation sites (Ser15, Ser78 and Ser82) by protein kinases including MAPKAP kinase 2 and the stress-activated protein kinase SAPK2 (p38). Hsp27 forms a multimeric complex within cells, and its primary chaperone function, like other small Hsps, appears to be the stabilization of denatured or aggregated proteins in a refolding competent state.

**Synonyms:**

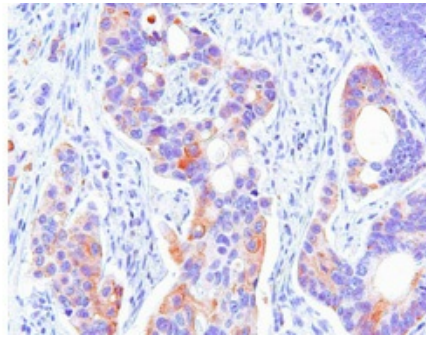
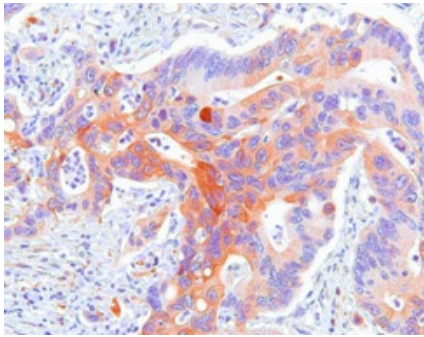
Heat shock protein beta-1, Heat shock 27 kDa protein, HSP28, 28 kDa heat shock protein, SRP27, HSP25

**Product images:**


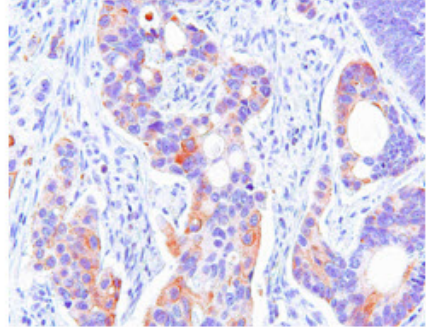
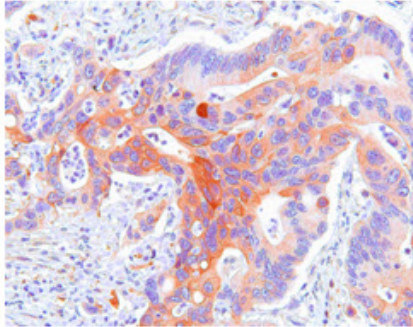
Cell lysates of HeLa (each 30ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human Hsp27 (1:1,000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.



Western blot analysis on HeLa cells: Cell lysates of HeLa (each 30 ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human Hsp27 (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.



Paraffin embedded sections of human colon cancer tissue were incubated with anti-human Hsp27 (1:50) for 2 hours at room temperature. Antigen retrieval was performed in 0.1M sodium citrate buffer and detected using Diaminobenzidine (DAB)



Immunohistochemistry : Paraffin embedded sections of human colon cancer tissue were incubated with anti-human Hsp27 (1:50) for 2 hours at room temperature. Antigen retrieval was performed in 0.1M sodium citrate buffer and Diaminobenzidine (DAB) was used for detection.

Human colon cancer tissue