

For Research Use Only

# HSP27 Polyclonal antibody

Catalog Number: 18284-1-AP

Featured Product

40 Publications



## Basic Information

|   |   |   |
|---|---|---|
| <b>Catalog Number:</b><br>18284-1-AP                          | <b>GenBank Accession Number:</b><br>BC012768    | <b>Purification Method:</b><br>Antigen affinity purification                              |
| <b>Size:</b><br>150ul , Concentration: 700 ug/ml by Nanodrop; | <b>GeneID (NCBI):</b><br>3315                   | <b>Recommended Dilutions:</b><br>WB 1:5000-1:50000<br>IHC 1:50-1:500<br>IF/ICC 1:50-1:500 |
| <b>Source:</b><br>Rabbit                                      | <b>UNIPROT ID:</b><br>P04792                    |   |
| <b>Isotype:</b><br>IgG  | <b>Full Name:</b><br>heat shock 27kDa protein 1 |   |
| <b>Immunogen Catalog Number:</b><br>AG13161                   | <b>Calculated MW:</b><br>19-23 kDa              |   |
|   | <b>Observed MW:</b><br>27 kDa                   |   |

## Applications

**Tested Applications:**  
WB, IHC, IF/ICC, FC (Intra), ELISA

**Cited Applications:**  
WB, IHC, IF, IP, CoIP, ELISA

**Species Specificity:**  
human, mouse, rat

**Cited Species:**  
human, mouse, rat, pig, chicken, fish

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

**Positive Controls:**

**WB :** A549 cells, HeLa cells, C6 cells, mouse liver tissue, HepG2 cells, U2OS cells

**IHC :** human lung cancer tissue, human liver cancer tissue, human gliomas tissue

**IF/ICC :** HeLa cells, MCF-7 cells

## Background Information

HSPB1, also known as heat shock protein 27 (HSP27), belongs to the small heat shock protein family which is induced in response to environmental challenges or/and developmental transitions. It is also an anti-apoptotic protein that plays crucial roles in tumorigenesis and cell survival and is reported to be an independent prognosis marker for cancer. Recently HSPB1 has been found to be a valuable marker for melanoma. In addition to the predicted 27 kDa, an extra 50-55 kDa representing dimeric form of HSPB1 may also be observed (PMID: 21353161). It's notable that mouse HSP27 is also named HSP25 and has the predicted MW between 19-23 kDa.

## Notable Publications

| Author             | Pubmed ID | Journal                 | Application |
|--------------------|-----------|-------------------------|-------------|
| Yini Dang          | 36297287  | Pharmaceuticals (Basel) | WB          |
| Folnetti A Alvarez | 36114323  | Breast Cancer Res Treat | WB          |
| Ying Wang          | 31492751  | J Biol Chem             | WB          |

## Storage

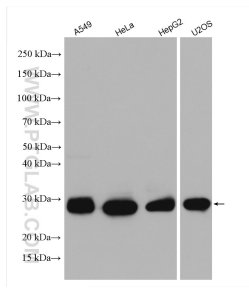
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

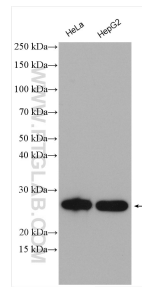
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

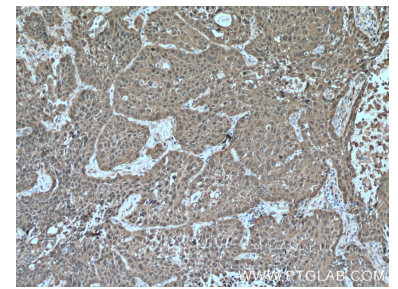
## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 18284-1-AP (HSP27 antibody) at dilution of 1:15000 incubated at room temperature for 1.5 hours.



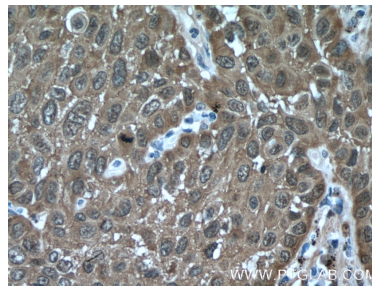
Various lysates were subjected to SDS PAGE followed by western blot with 18284-1-AP (HSP27 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



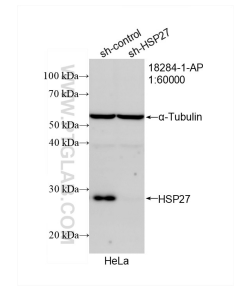
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 18284-1-AP (HSP27 antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



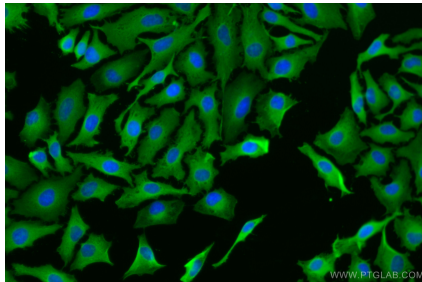
1X10<sup>6</sup> MCF-7 cells were intracellularly stained with 0.5 ug Anti-Human HSP27 (18284-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.5 ug Control Antibody. Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 18284-1-AP (HSP27 antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



WB result of HSP27 antibody (18284-1-AP; 1:60000; incubated at room temperature for 1.5 hours) with sh-Control and sh-HSP27 transfected HeLa cells.



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using HSP27 antibody (18284-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2).