

For Research Use Only

# HSP27 Monoclonal antibody

Catalog Number: 66767-1-Ig

Featured Product

2 Publications



## Basic Information

Catalog Number:

66767-1-Ig

GenBank Accession Number:

BC012768

Purification Method:

Protein G purification

Size:

150ul, Concentration: 2686 ug/ml by Nanodrop and 1000 ug/ml by Bradford method using BSA as the standard;

GeneID (NCBI):

3315

CloneNo.:

3E7A1

Source:

Mouse

UNIPROT ID:

P04792

Recommended Dilutions:

WB 1:20000-1:100000

IHC 1:1000-1:4000

IF 1:50-1:500

Isotype:

IgG1

Full Name:

heat shock 27kDa protein 1

Calculated MW:

19-23 kDa

Immunogen Catalog Number:

AG27859

Observed MW:

27 kDa

## Applications

Tested Applications:

WB, IHC, IF, FC (Intra), ELISA

Cited Applications:

WB, IF

Species Specificity:

human, mouse, rat, zebrafish

Cited Species:

human, mouse

**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 : HCT 116 cells, HeLa cells, HSC-T6 cells, mouse liver tissue, U2OS cells, A549 cells, HepG2 cells, HuH-7 cells

IHC : human gliomas tissue, human liver tissue

IF : zebrafish retina, 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 (21353161).

## Notable Publications

| Author       | Pubmed ID | Journal   | Application |
|--------------|-----------|-----------|-------------|
| Xiao Zhang   | 32945483  | Oncol Rep | IF          |
| Fangjia Yang | 38507480  | Sci Adv   | WB,IF       |

## 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

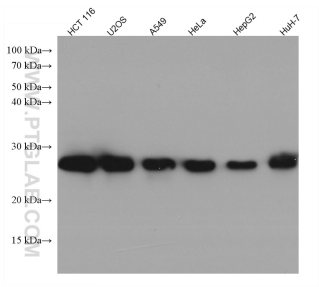
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

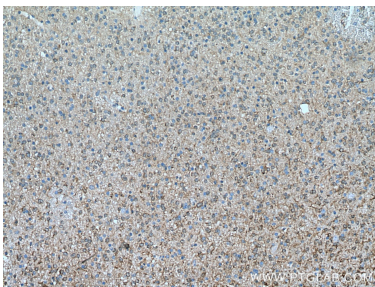
E: proteintech@ptglab.com  
W: ptglab.com

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

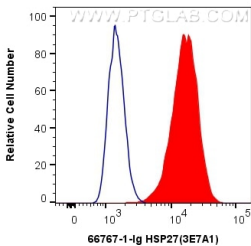
Selected Validation Data



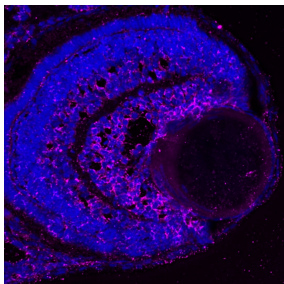
Various lysates were subjected to SDS PAGE followed by western blot with 66767-1-Ig (HSPB1 antibody) at dilution of 1:50000 incubated at room temperature for 1.5 hours.



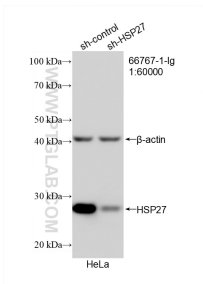
Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 66767-1-Ig (HSPB1 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



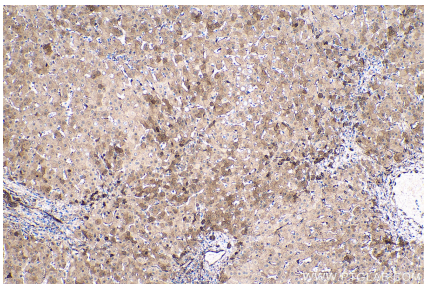
1X10<sup>6</sup> HepG2 cells were intracellularly stained with 0.5 ug Anti-Human HSP27 (66767-1-Ig, Clone:3E7A1) (red) labeled with FlexAble CoraLite® Plus 555 Antibody Labeling Kit for Mouse IgG1 (KFA022), or 0.5 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Antibody staining on tissue sections of the zebrafish retina at 5 days post fertilisation (dpf) for Heatshock protein 27 (Hsp27;magenta); (#66767-1-Ig) Dilution 1:200. Tissue fixed overnight in 4% PFA; DAPI, blue. Data generated by Natalia Jaroszynska in Professor Ryan MacDonald's lab, University College London, UK.



WB result of HSP27 antibody (66767-1-Ig; 1:60000; incubated at room temperature for 1.5 hours) with sh-Control and sh-HSP27 transfected HeLa cells.



Immunohistochemical analysis of paraffin-embedded human liver tissue slide using 66767-1-Ig (HSP27 antibody) at dilution of 1:8000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).