For Research Use Only

HSP27 Polyclonal antibody

Catalog Number:18284-1-AP Featured Product 35 Publications

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Basic Information

Catalog Number:
18284-1-AP

Size:
700 μg/ml

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG13161

GenBank Accession Number:
BC012768

GeneID (NCBI):
3315

UNIPROT ID:
P04792

Full Name:
heat shock 27kDa protein 1

Calculated MW:
19-23 kDa

Observed MW:
27 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:5000-1:50000
IHC 1:50-1:500
IF 1:50-1:500

Applications

Tested Applications:
FC, IF/ICC, IHC, WB, ELISA

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

Species Specificity:
human, rat, mouse

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

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 : 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

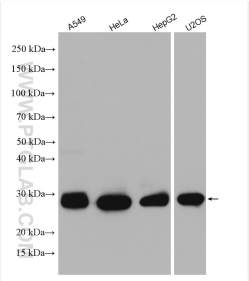
Storage

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

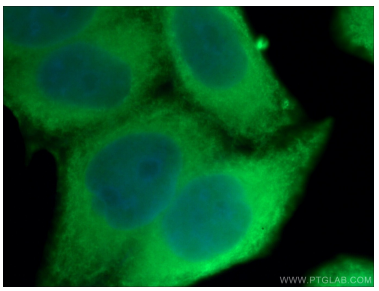
For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

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

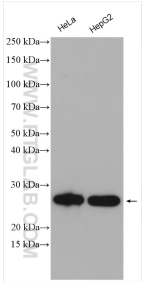
Selected Validation Data



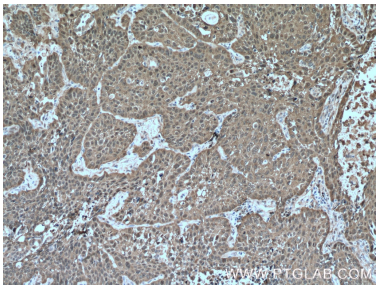
Various lysates were subjected to SDS PAGE followed by western blot with 18284-1-AP (HSP27 antibody) at dilution of 1:15000 incubated at room temperature for 1.5 hours.



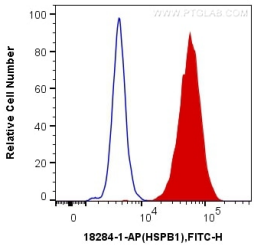
Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using 18284-1-AP (HSP27 antibody) at dilution of 1:100 and Alexa Fluor 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



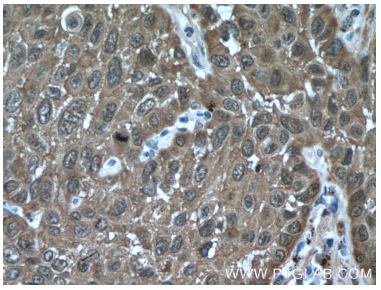
Various lysates were subjected to SDS PAGE followed by western blot with 18284-1-AP (HSP27 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



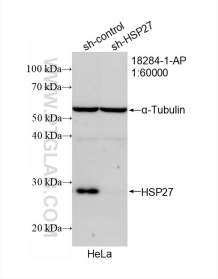
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 18284-1-AP (HSP27 antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1X10^6 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.