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Phospho-HSP27/HSPB1-S82 Rabbit mAb

Catalog No.: AP1660 Recombinant

Basic Information

Observed MW
27 kDa

Calculated MW
23 kDa

Category
Primary antibody

Applications
WB,IF/ICC,IHC-P,ELISA

Cross-Reactivity
Human, Mouse, Rat

CloneNo number
ARC4275

Background

This gene encodes a member of the small heat shock protein (HSP20) family of proteins. In response to environmental stress, the encoded protein translocates from the cytoplasm to the nucleus and functions as a molecular chaperone that promotes the correct folding of other proteins. This protein plays an important role in the differentiation of a wide variety of cell types. Expression of this gene is correlated with poor clinical outcome in multiple human cancers, and the encoded protein may promote cancer cell proliferation and metastasis, while protecting cancer cells from apoptosis. Mutations in this gene have been identified in human patients with Charcot-Marie-Tooth disease and distal hereditary motor neuropathy.

Recommended Dilutions

WB	1:100000 - 1:400000
IF/ICC	1:200 - 1:2000(Human) 1:1000 - 1:4000(Mouse)
IHC-P	1:500 - 1:2000
ELISA	Recommended starting concentration is 1 μg/mL. Please optimize the concentration based on your specific assay requirements. For high-ratio antibody dilutions (≥1:10000)，a sequential dilution method is strongly recommended to ensure measurement accuracy.

Immunogen Information

Gene ID
3315

Swiss Prot
P04792

Immunogen
This information is considered to be commercially sensitive.

Synonyms

Product Information

Source
Rabbit

Isotype
IgG

Purification
Affinity purification

Storage
Store at -20℃

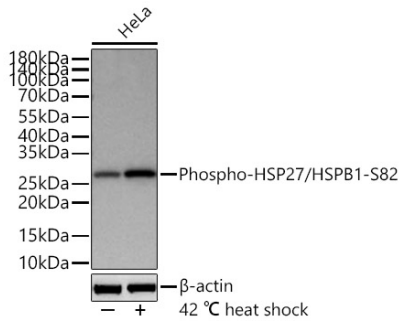
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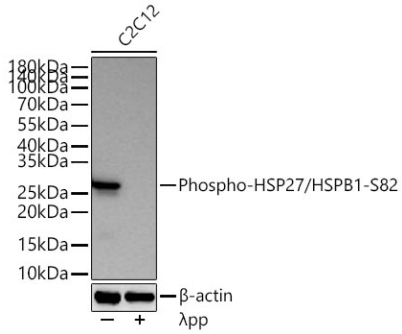
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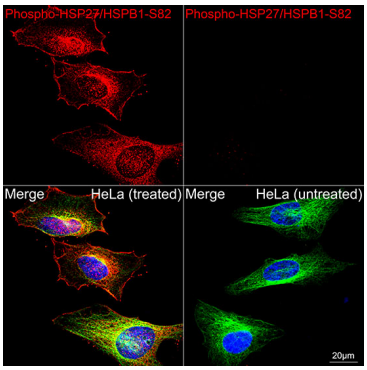
Validation Data



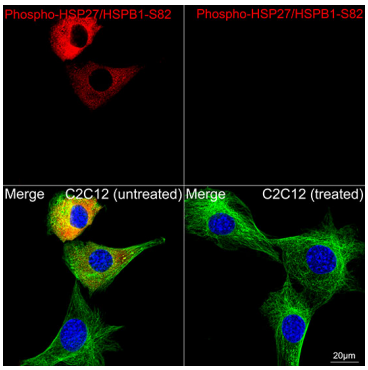
Western blot analysis of lysates from HeLa cells using Phospho-HSP27/HSPB1-S82 Rabbit mAb (AP1660) at 1:200000 dilution incubated overnight at 4℃. HeLa cells were treated with heat shock at 42 ℃ for 90 minutes after serum starvation overnight.|Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.|Lysates/proteins: 30 µg per lane.| Blocking buffer: 3% nonfat dry milk in TBST.| Detection: ECL Basic Kit (RM00020).| Exposure time: 10 s.



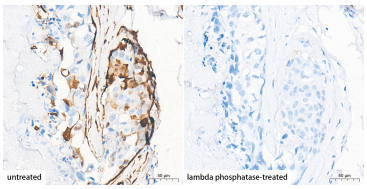
Western blot analysis of lysates from C2C12 cells using Phospho-HSP27/HSPB1-S82 Rabbit mAb (AP1660) at 1:200000 dilution incubated overnight at 4℃. C2C12 cells were treated with λpp (2 U/µL) at 30℃ for 1 hour.|Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.|Lysates/proteins: 30 µg per lane.| Blocking buffer: 3% nonfat dry milk in TBST.| Detection: ECL Basic Kit (RM00020).| Exposure time: 20 s.



Confocal imaging of HeLa cells (treated with UV) and HeLa cells (untreated) using Phospho-HSP27/HSPB1-S82 Rabbit mAb (AP1660, dilution 1:1000) followed by a further incubation with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α-Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) (AS037, dilution 1:800) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.

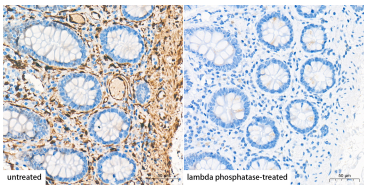


Confocal imaging of C2C12 cells (untreated) and C2C12 cells (treated with λpp) using Phospho-HSP27/HSPB1-S82 Rabbit mAb (AP1660, dilution 1:1000) followed by a further incubation with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α-Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) (AS037, dilution 1:800) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.

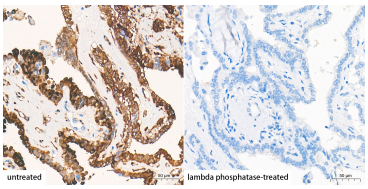


Immunohistochemistry analysis of paraffin-embedded Human breast cancer tissue, untreated (left) and lambda phosphatase-treated (right), using Phospho-HSP27/HSPB1-S82 Rabbit mAb (AP1660) at a dilution of 1:1000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.

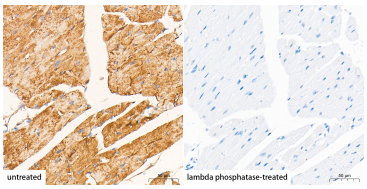
Validation Data



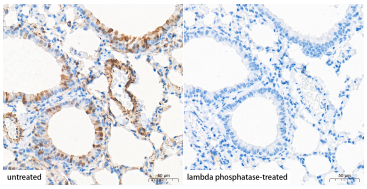
Immunohistochemistry analysis of paraffin-embedded Human colon tissue, untreated (left) and lambda phosphatase-treated (right), using Phospho-HSP27/HSPB1-S82 Rabbit mAb (AP1660) at a dilution of 1:1000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



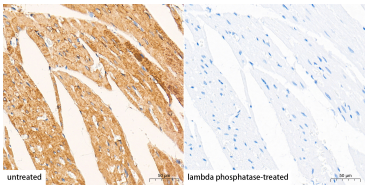
Immunohistochemistry analysis of paraffin-embedded Human thyroid cancer tissue, untreated (left) and lambda phosphatase-treated (right), using Phospho-HSP27/HSPB1-S82 Rabbit mAb (AP1660) at a dilution of 1:1000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Mouse heart tissue, untreated (left) and lambda phosphatase-treated (right), using Phospho-HSP27/HSPB1-S82 Rabbit mAb (AP1660) at a dilution of 1:1000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Mouse lung tissue, untreated (left) and lambda phosphatase-treated (right), using Phospho-HSP27/HSPB1-S82 Rabbit mAb (AP1660) at a dilution of 1:1000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Rat heart tissue, untreated (left) and lambda phosphatase-treated (right), using Phospho-HSP27/HSPB1-S82 Rabbit mAb (AP1660) at a dilution of 1:1000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.