HSP70 Polyclonal ANTIBODY

Catalog Number: 10995-1-AP

Basic Information

Catalog Number: 10995-1-AP
Size: 49 μg/150 μl
Source: Rabbit
Isotype: IgG
Purification Method: Antigen affinity purification
Immunogen Catalog Number: AG1446

GenBank Accession Number: BC065022
GeneID (NCBI): 3303
Full Name: heat shock 70kDa protein 1A
Calculated MW: 70 kDa
Observed MW: 66-70 kDa

Recommended Dilutions:
WB: 1:2000-1:10000
IP: 0.5-4.0 μg for IP and 1:200-1:2000 for WB
IHC: 1:50-1:500
IF: 1:20-1:200

Applications

Tested Applications: FC, IF, IHC, IP, WB, ELISA
Cited Applications: IF, IHC, WB
Species Specificity: human, mouse, rat
Cited Species: human, mouse, oysters, rat

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

Background Information

HSPA1A, collectively known as HSP70 (also referred to as HSP72), is a stress-inducible member of heat-shock protein 70 (HSP70) proteins which are highly conserved chaperons implicated in protein folding, protein refolding, protein transport, and protein targeting. Encoded by two closely linked, intronless and stress-inducible genes, HSPA1A and HSPA1B differ by only two amino acids and are believed to be fully interchangeable proteins. HSPA1A is a cytosol/nuclear protein able to translocate between cytoplasm and nucleus. Generally, HSPA1A is thought to be expressed in unstressed normal cells at low or undetectable levels. Expression of HSPA1A protein can be highly activated by various stressful stimuli. Significant up-regulation of HSPA1A has been found in various tumors. Recently it has been reported that HSPA1A can be constitutively expressed in selected cell types. HSP70 is a useful marker for exosome. This antibody well recognized the endogenous HSP70 protein in multiple cell lines. (21373891)

Notable Publications

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<td>Sheng-Yen Lin</td>
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<td>Bin Xu</td>
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Storage

Store at -20°C. Stable for one year after shipment.
Storage Buffer: PBS with 0.1% 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 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or (1312) 405-8468 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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WB result of 10995-1-AP (HSPA1A antibody).

HeLa cells were subjected to SDS PAGE followed by western blot with 10995-1-AP (HSPA1A antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.

Immunofluorescent analysis of HepG2 cells, using HSPA1A antibody 10995-1-AP at 1:50 dilution and Rhodamine-labeled goat anti-rabbit IgG (red). Blue pseudocolor = DAPI (fluorescent DNA dye).

Immunohistochemical analysis of paraffin-embedded mouse skin tissue slide using 10995-1-AP (HSP70 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieved with Tris-EDTA buffer (pH 9).

IP Result of anti-HSP70 (IP: 10995-1-AP, 3ug; Detection: 10995-1-AP 1:1000) with mouse brain tissue lysate 3600ug.

IP Result of anti-HSP70 (IP: 10995-1-AP, 3ug; Detection: 10995-1-AP 1:1000) with mouse brain tissue lysate 3600ug.

1X10^6 HepG2 cells were stained with 0.2ug HSP70 antibody (10995-1-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1000.