

## HSP70 Polyclonal Antibody

Catalog number: 10995-1-AP

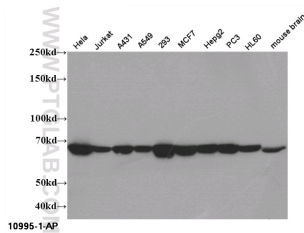
Size: 49 µg/150 µl

Source: Rabbit

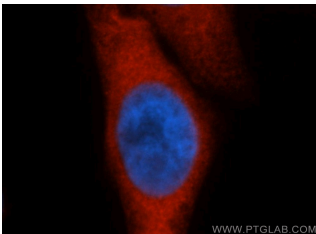
Isotype: IgG

Synonyms:

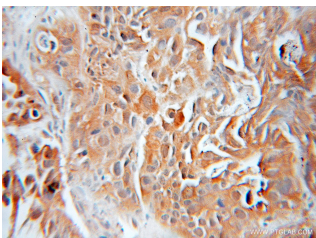
HSPA1A; FLJ54303, FLJ54370, FLJ54392, FLJ54408, FLJ75127, Heat shock 70 kDa protein 1/2, heat shock 70kDa protein 1A, HSP70, HSP70 1, HSP70 1/HSP70 2, HSP70 1A, HSP70.1/HSP70.2, HSP70I, HSP72, HSPA1, HSPA1A, HSPA1B



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



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 of paraffin-embedded human prostate cancer using 10995-1-AP (HSP70 antibody) at dilution of 1:100 (under 10x lens)

### Background

HSPA1A, collectively known as HSP70 (also referred to 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. This antibody well recognized the endogenous HSPA1A protein in multiple cell lines. (21373891)

### Applications

Tested applications:

ELISA, IHC, WB, IF, FC, IP

Cited applications:

WB

Species specificity:

Human, Mouse, Rat; other species not tested.

Cited species:

Mouse, rat

Calculated HSP70 MW:

70 kDa

Observed HSP70 MW:

66-70 kDa

Positive WB detected in

Multi-cells/tissue, A431 cells, A549 cells, COLO 320 cells, HepG2 cells, human brain tissue, Jurkat cells, MCF7 cells, mouse uterus tissue, PC-3 cells

Positive IP detected in

Mouse brain tissue

Positive IHC detected in

Human prostate cancer tissue, human breast cancer tissue, human liver cancer tissue

Positive IF detected in

HepG2 cells

Positive FC detected in

HepG2 cells

Recommended dilution:

WB: 1:1000-1:10000

IP: 1:500-1:5000

IHC: 1:20-1:200

IF: 1:20-1:200

FC: N/A

Application key: WB = Western blotting, IHC = Immunohistochemistry, IF = Immunofluorescence, IP = Immunoprecipitation

### Immunogen information

Immunogen:

Ag1446

GenBank accession number:

BC009322

Gene ID (NCBI):

3303

Full name:

Heat shock 70kDa protein 1A

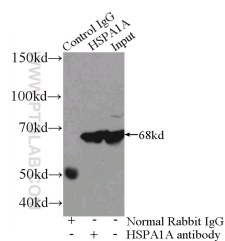
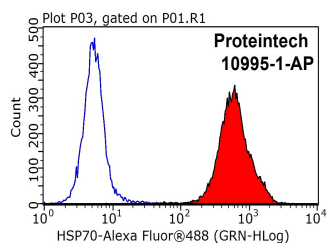
### Product information

Purification method:

Antigen affinity purification

Storage:

PBS with 0.1% sodium azide and 50% glycerol pH 7.3. Store at -20°C.



1X10<sup>6</sup> 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.

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