

For Research Use Only

# HSF1 Polyclonal antibody

Catalog Number: 51034-1-AP

Featured Product

19 Publications



## Basic Information

### Catalog Number:

51034-1-AP

### Size:

150ul, Concentration: 700 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG0739

### GenBank Accession Number:

BC014638

### GeneID (NCBI):

3297

### UNIPROT ID:

Q00613

### Full Name:

heat shock transcription factor 1

### Calculated MW:

529 aa, 57 kDa

### Observed MW:

68-80 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:1000-1:4000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC 1:500-1:2000

IF/ICC 1:200-1:800

## Applications

### Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

### Cited Applications:

WB, IHC, IF, IP

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat, bovine

**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** : HEK-293 cells, HeLa cells, A431 cells, HepG2 cells, K-562 cells, NIH/3T3 cells, HEK-293T cells, C6 cells, mouse ovary tissue, mouse testis tissue

**IP** : Jurkat cells,

**IHC** : human lung cancer tissue, human testis tissue

**IF/ICC** : A431 cells,

## Background Information

HSF1 belongs to heat-shock transcription factors that activate heat-shock response genes under conditions of heat or other stresses. Also, HSF1 has been linked with oogenesis, spermatogenesis, and placental development. It can activate AKT and inactivate JNK and CASP3 to protect cardiomyocytes from death. And it has a role in the regulation of life span and establishes a role for SIRT1 in protein homeostasis and heat-shock response. The calculated molecular weight of HSF1 is 57 kDa, but HSF1 migrates at approximately 80 kDa which likely represents different phosphorylation states (PMID: 18434628).

## Notable Publications

Author	Pubmed ID	Journal	Application
Donald A Jurivich	31612204	J Gerontol A Biol Sci Med Sci	WB
Thomas G Martin	33989081	Am J Physiol Heart Circ Physiol	WB,IF
Fangfang Yuan	35511979	Science	WB

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

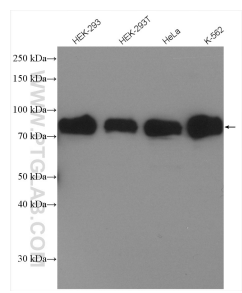
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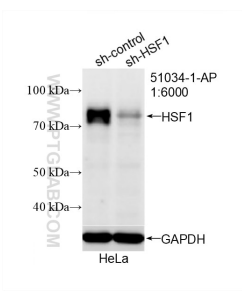
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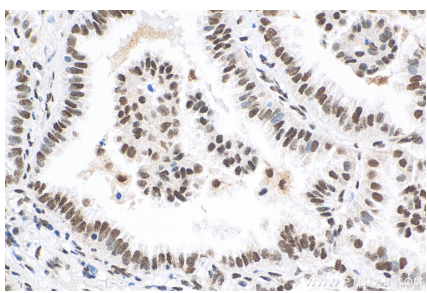
Selected Validation Data



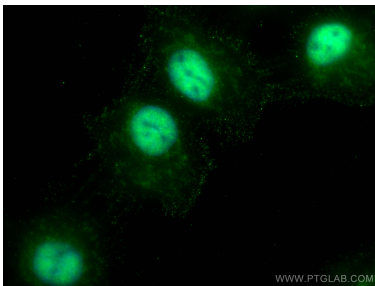
Various lysates were subjected to SDS PAGE followed by western blot with 51034-1-AP (HSF1 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



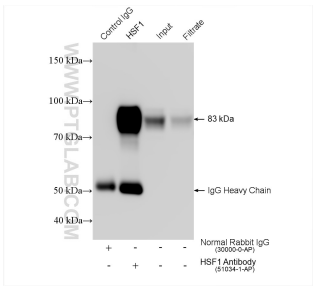
WB result of HSF1 antibody (51034-1-AP; 1:6000; incubated at room temperature for 1.5 hours) with sh-Control and sh-HSF1 transfected HeLa cells.



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 51034-1-AP (HSF1 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Methanol) fixed A431 cells using HSF1 antibody (51034-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L).



IP result of anti-HSF1 (IP:51034-1-AP, 4ug; Detection:51034-1-AP 1:8000) with Jurkat cells lysate 1560 ug.