

## **HSF1** (phospho Ser121) Polyclonal Antibody

Catalog No: YP0771

**Reactivity:** Human; Mouse

**Applications:** WB;IHC;IF;ELISA

Target: HSF1

Fields: >>Legionellosis

Gene Name: HSF1

**Protein Name:** Heat shock factor protein 1

Q00613

P38532

Human Gene Id: 3297

**Human Swiss Prot** 

Idiliali Swiss Fiot

No:

Mouse Gene Id: 15499

**Mouse Swiss Prot** 

No:

**Immunogen:** The antiserum was produced against synthesized peptide derived from human

HSF1 around the phosphorylation site of Ser121. AA range:87-136

Specificity: Phospho-HSF1 (S121) Polyclonal Antibody detects endogenous levels of HSF1

protein only when phosphorylated at S121.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

**Dilution :** WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:20000.. IF 1:50-200

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

1/3



-15°C to -25°C/1 year(Do not lower than -25°C) **Storage Stability:** 

**Observed Band:** 50kD

SAPK JNK **Cell Pathway:** 

**Background:** heat shock transcription factor 1(HSF1) Homo sapiens The product of this gene

> is a transcription factor that is rapidly induced after temperature stress and binds heat shock promoter elements (HSE). This protein plays a role in the regulation of lifespan. Expression of this gene is repressed by phsphorylation, which promotes

binding by heat shock protein 90. [provided by RefSeq, Aug 2016],

**Function:** function:DNA-binding protein that specifically binds heat shock promoter

> elements (HSE) and activates transcription. In higher eukaryotes, HSF is unable to bind to the HSE unless the cells are heat shocked.,PTM:Phosphorylated on multiple serine residues, a subset of which are involved in stress-related regulation of transcription activation. Constitutive phosphorylation represses transcriptional activity at normal temperatures. Levels increase on specific residues heat-shock and enhance HSF1 transactivation activity. Phosphorylation

on Ser-307 derepresses activation on heat-stress and in combination with Ser-303 phosphorylation appears to be involved in recovery after heat-stress. Phosphorylated on Ser-230 by CAMK2, in vitro. Cadmium also enhances phosphorylation at this site. Phosphorylation on Ser-303 is a prerequisite for

HSF1 sumoylation. Phosphorylation on Ser-121 inhibits transacti

Subcellular Location:

Nucleus . Cytoplasm . Nucleus, nucleoplasm . Cytoplasm, perinuclear region . Cytoplasm, cytoskeleton, spindle pole. Cytoplasm, cytoskeleton, microtubule

organizing center, centrosome. Chromosome, centromere, kinetochore. The monomeric form is cytoplasmic in unstressed cells (PubMed:8455624.

PubMed:26159920). Predominantly nuclear protein in both unstressed and heat shocked cells (PubMed:10413683, PubMed:10359787). Translocates in the nucleus upon heat shock (PubMed:8455624). Nucleocytoplasmic shuttling

protein (PubMed:26159920). Colocalizes with IER5 in the nucleus

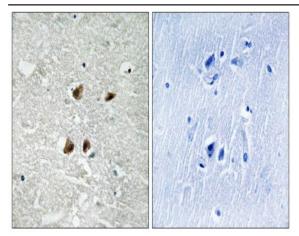
(PubMed:27354066). Colocalizes with BAG3 to the nucleus upon heat stress (PubMed:8455624, PubMed:26159920). Localizes in subnuclear granules called

nuclear stress bodies (nSBs) upon heat shock (PubMed:11447121,

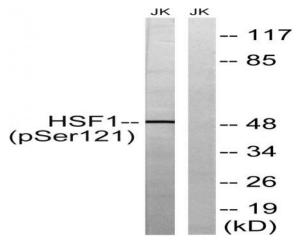
PubMed:1151455

**Expression:** Adipose tissue, Brain, Epithelium, Muscle,

## **Products Images**



Immunohistochemistry analysis of paraffin-embedded human brain, using HSF1 (Phospho-Ser121) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from Jurkat cells treated with TNF 2500U/ML 30', using HSF1 (Phospho-Ser121) Antibody. The lane on the right is blocked with the phospho peptide.