

HSF1 (phospho Ser307) Polyclonal Antibody

Catalog No: YP1188

Reactivity: Human; Rat; Mouse;

Applications: WB;IF;ELISA

Target: HSF1

Fields: >>Legionellosis

Gene Name: HSF1

Protein Name: Heat shock factor protein 1

Human Gene Id: 3297

Human Swiss Prot

s Prot Q00613

P38532

No:

Mouse Swiss Prot

No:

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

HSF1 around the phosphorylation site of Ser307. AA range:273-322

Specificity: Phospho-HSF1 (S307) Polyclonal Antibody detects endogenous levels of HSF1

protein only when phosphorylated at S307.

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. IF 1:200 - 1:1000. ELISA: 1:5000. Not yet tested in other

applications.

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

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

1/4



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

Observed Band: 30kD

Cell Pathway: SAPK_JNK

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,

Sort: 7862

No4:

Host: Rabbit

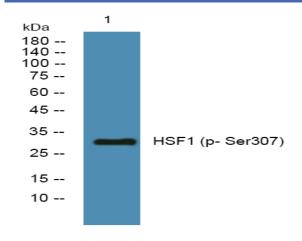
Phospho



Modifications:



Products Images



Western blot analysis of lysates from A431 cells, primary antibody was diluted at 1:1000, $4\,^{\circ}\text{over}$ night