

HSF1 Polyclonal Antibody

Catalog No: YT2236

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

Hullian Swiss Fit

No:

Mouse Gene Id: 15499

Mouse Swiss Prot

No:

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

HSF1. AA range:270-319

Specificity: HSF1 Polyclonal Antibody detects endogenous levels of HSF1 protein.

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. IF 1:200 - 1:1000. ELISA: 1:10000. 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

1/3



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

Observed Band: 82kD

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 Nucleus . Cytoplasm . Nucleus, nucleoplasm . Cytoplasm, perinuclear region . Location:

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

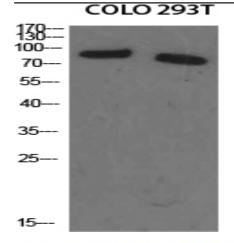
nuclear stress bodies (nSBs) upon heat shock (PubMed:11447121,

PubMed:1151455

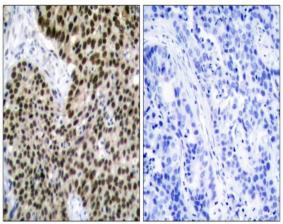
Expression: Adipose tissue, Brain, Epithelium, Muscle,

Products Images

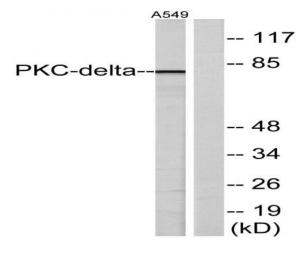
HSF1



Western Blot analysis of various cells using HSF1 Polyclonal Antibody diluted at 1:1000



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using HSF1 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from A549 cells, treated with TNF- α 20ng/ml 30', using HSF1 Antibody. The lane on the right is blocked with the synthesized peptide.