

## HSF1 Polyclonal Antibody

<b>Catalog No :</b>	YT2236
<b>Reactivity :</b>	Human;Mouse
<b>Applications :</b>	WB;IHC;IF;ELISA
<b>Target :</b>	HSF1
<b>Fields :</b>	>>Legionellosis
<b>Gene Name :</b>	HSF1
<b>Protein Name :</b>	Heat shock factor protein 1
<b>Human Gene Id :</b>	3297
<b>Human Swiss Prot No :</b>	Q00613
<b>Mouse Gene Id :</b>	15499
<b>Mouse Swiss Prot No :</b>	P38532
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human HSF1. AA range:270-319
<b>Specificity :</b>	HSF1 Polyclonal Antibody detects endogenous levels of HSF1 protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:10000. Not yet tested in other applications.
<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Concentration :</b>	1 mg/ml

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

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**Observed Band :** 82kD

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**Cell Pathway :** SAPK\_JNK

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**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 phosphorylation, which promotes binding by heat shock protein 90. [provided by RefSeq, Aug 2016],

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**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

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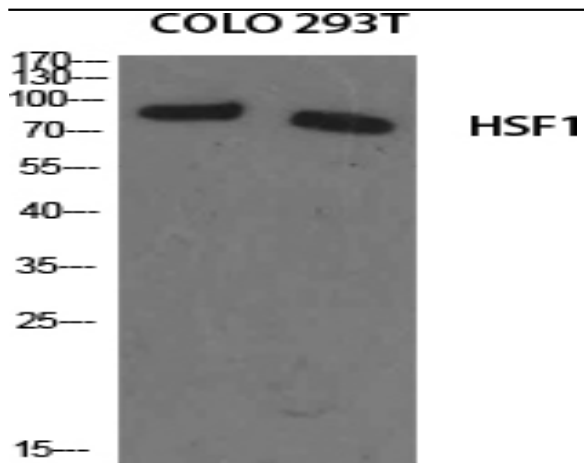
**Subcellular Location :** Nucleus . Cytoplasm . Nucleus, nucleoplasm . Cytoplasm, perinuclear region . Cytoplasm, cytoskeleton, spindle pole . Cytoplasm, cytoskeleton, microtubule organizing center, centrosome . Chromosome, centromere, kinetochore . The monomeric form is cytoplasmic in unstressed cells (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

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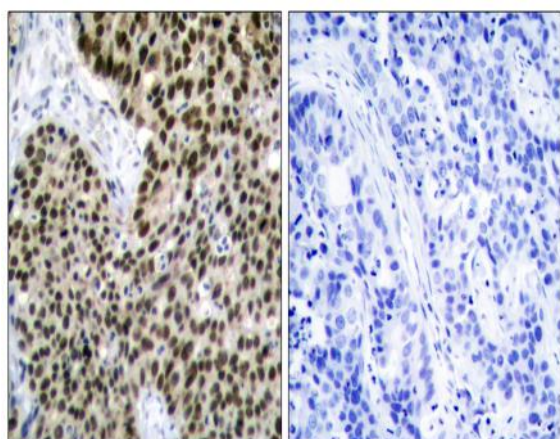
**Expression :** Adipose tissue,Brain,Epithelium,Muscle,

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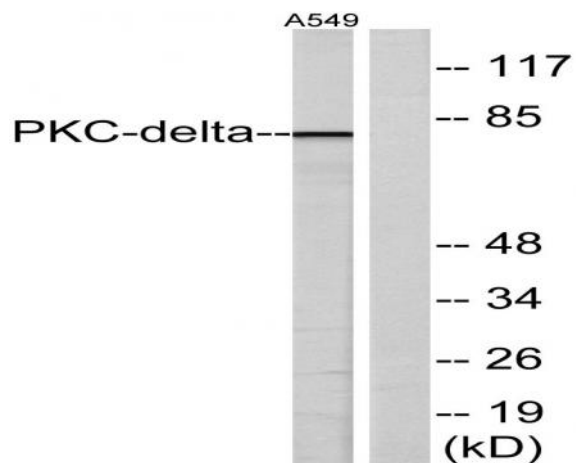
## Products Images



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- $\alpha$  20ng/ml 30', using HSF1 Antibody. The lane on the right is blocked with the synthesized peptide.