



# HSF1 (phospho Thr142) Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-01409
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse
<b>Applications</b>	IHC;IF;ELISA
<b>Gene Name</b>	HSF1
<b>Protein Name</b>	Heat shock factor protein 1
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human HSF1 around the phosphorylation site of Thr142. AA range:108-157
<b>Specificity</b>	Phospho-HSF1 (T142) Polyclonal Antibody detects endogenous levels of HSF1 protein only when phosphorylated at T142.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	IHC: 1/100 - 1/300. ELISA: 1/20000.. IF 1:50-200
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	HSF1; HSTF1; Heat shock factor protein 1; HSF 1; Heat shock transcription factor 1; HSTF 1
<b>Observed Band</b>	
<b>Cell Pathway</b>	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)
<b>Tissue Specificity</b>	Adipose tissue,Brain,Epithelium,Muscle,
<b>Function</b>	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

#### 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],

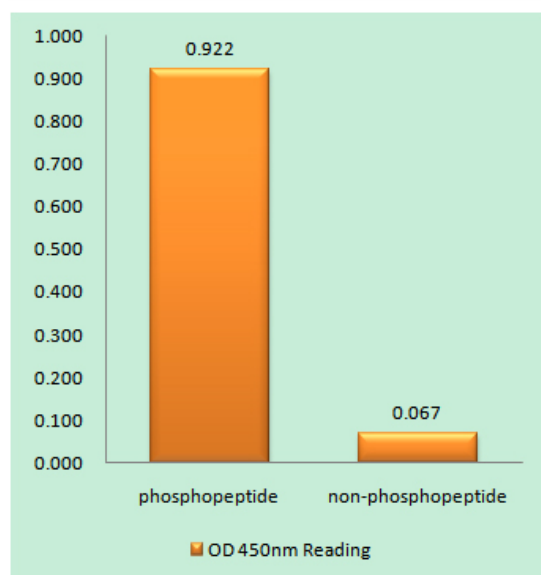
#### matters needing attention

Avoid repeated freezing and thawing!

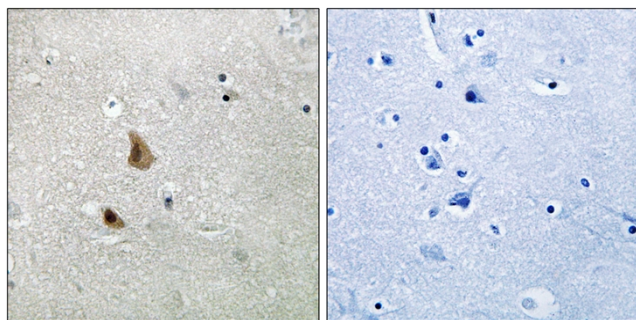
#### Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

### Products Images



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using HSF1 (Phospho-Thr142) Antibody



Immunohistochemistry analysis of paraffin-embedded human brain, using HSF1 (Phospho-Thr142) Antibody. The picture on the right is blocked with the phosphopeptide.