

HSF1 (phospho Ser303) Polyclonal Antibody

Catalog No :	YP0133
Reactivity :	Human;Mouse
Applications :	WB;IHC;IF;ELISA
Target :	HSF1
Fields :	>>Legionellosis
Gene Name :	HSF1
Protein Name :	Heat shock factor protein 1
Human Gene Id :	3297
Human Swiss Prot No :	Q00613
Mouse Gene Id :	15499
Mouse Swiss Prot No :	P38532
Immunogen :	The antiserum was produced against synthesized peptide derived from human HSF1 around the phosphorylation site of Ser303. AA range:270-319
Specificity :	Phospho-HSF1 (S303) Polyclonal Antibody detects endogenous levels of HSF1 protein only when phosphorylated at S303.
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: 1:20000. 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

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

Observed Band : 82kD

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 phosphorylation, 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,

Tag : orthogonal

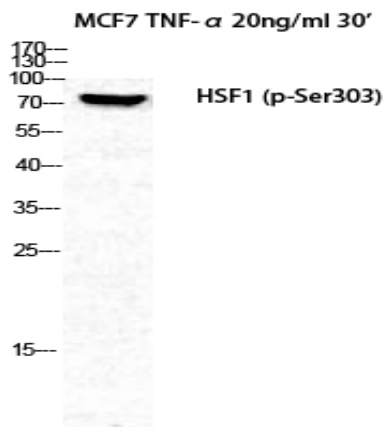
Sort : 7861

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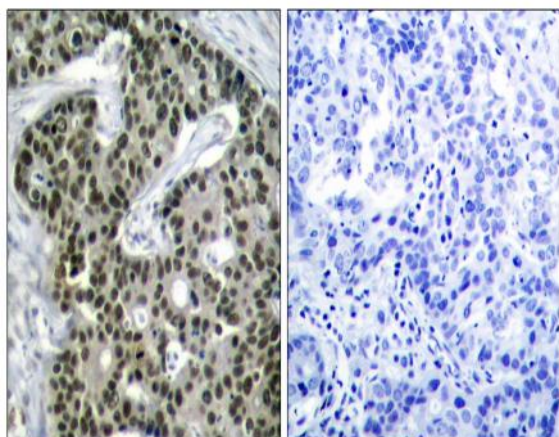
Host: Rabbit

Modifications : Phospho

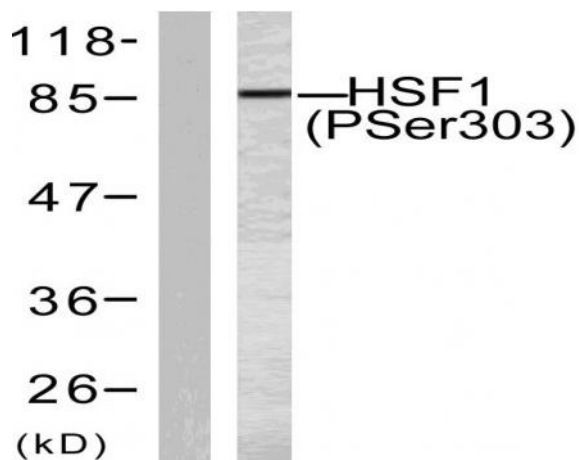
Products Images



Western Blot analysis of MCF7+TNF cells using Phospho-HSF1 (S303) Polyclonal Antibody diluted at 1:1000



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using HSF1 (Phospho-Ser303) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from MCF7 cells treated with TNF-alpha 20ng/ml 30', using HSF1 (Phospho-Ser303) Antibody. The lane on the left is blocked with the phospho peptide.