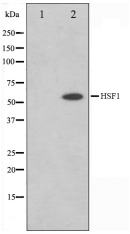
HSF1 Ab

Cat.#: AF0098	Concn.: 1mg/ml	Mol.Wt.: 55kDa
Size: 100ul,200ul	Source: Rabbit	Clonality: Polyclonal

Application:	WB: 1:500~1:3000
Reactivity:	Human,Mouse
Purification:	The antiserum was purified by peptide affinity chromatography using SulfoLink™ Coupling Resin (Thermo Fisher Scientific).
Specificity:	HSF1 Ab detects endogenous levels of total HSF1.
Immunogen:	A synthesized peptide derived from human HSF1.
Uniprot:	Q00613
Description:	HSF1 a heat-shock transcription factor. Transcription of heat-shock genes is rapidly induced after temperature stress. Hsp90, by itself and/or associated with multichaperone complexes, is a major repressor of HSF1. Two alternatively spliced isoforms have been described.
Subcellular Location:	Cytoplasm. Nucleus. Cytoplasmic during normal growth. On activation, translocates to nuclear stress granules. Colocalizes with SUMO1 in nuclear stress granules.
Similarity:	In unstressed cells, spontaneous homotrimerization is inhibited (PubMed:7935471, PubMed:7760831). Intramolecular interactions between the hydrophobic repeat HR-A/B and HR-C regions are necessary to maintain HSF1 in the inactive, monomeric conformation (PubMed:7935471, PubMed:7623826). Furthermore, intramolecular interactions between the regulatory domain and the nonadjacent transactivation domain prevents transcriptional activation, a process that is relieved upon heat shock (PubMed:7760831). The regulatory domain is necessary for full repression of the transcriptional activation domain in unstressed cells through its phosphorylation on Ser-303 and Ser-307 (PubMed:8946918, PubMed:9121459). In heat stressed cells, HSF1 homotrimerization occurs through formation of a three-stranded coiled-coil structure generated by intermolecular interactions between HR-A/B regions allowing DNA-binding activity (PubMed:7935471). The D domain is necessary for translocation to the nucleus, interaction with JNK1 and MAPK3 and efficient JNK1- and MAPK3-dependent phosphorylation (PubMed:10747973). The regulatory domain confers heat shock inducibility on the transcriptional transactivation domain (PubMed:7760831). The regulatory

	domain is necessary for transcriptional activation through its phosphorylation on Ser-230 upon heat shock (PubMed:11447121). 9aaTAD is a transactivation motif present in a large number of yeast and animal transcription factors (PubMed:17467953).Belongs to the HSF family.
Storage Condition and Buffer:	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.Store at -20 °C.Stable for 12 months from date of receipt.



Western blot analysis on Jurkat cell lysate using HSF1 Ab,The lane on the left is treated with the antigen-specific peptide.

IMPORTANT: For western blot, incubate membrane with diluted primary Ab in 5% w/v milk , 1X TBS, 0.1% Tween®20 at 4°C with gentle shaking, overnight.