

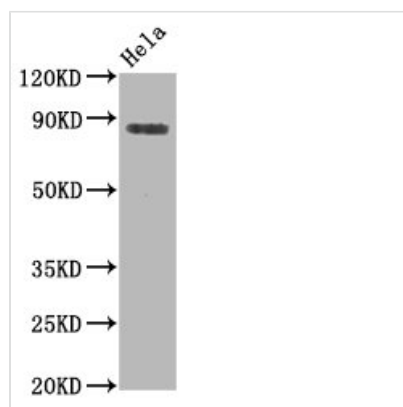


Phospho-HSF1 (S326) Recombinant Monoclonal Antibody

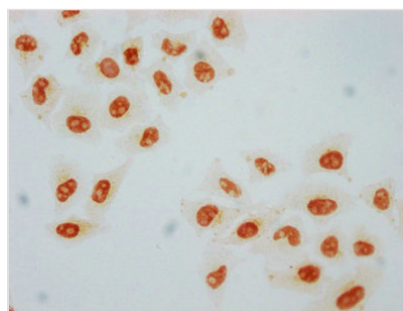
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| Product Code | CSB-RA010791A326pHUU |
| Abbreviation | Heat shock factor protein 1 |
| Storage | Upon receipt, store at -20°C or -80°C. Avoid repeated freeze. |
| Uniprot No. | Q00613 |
| Immunogen | A synthesized peptide derived from Human Phospho-HSF1 (S326) |
| Species Reactivity | Human |
| Tested Applications | ELISA, WB, IHC; Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200 |
| Relevance | <p>Function as a stress-inducible and DNA-binding transcription factor that plays a central role in the transcriptional activation of the heat shock response (HSR), leading to the expression of a large class of molecular chaperones heat shock proteins (HSPs) that protect cells from cellular insults' damage (PubMed:1871105, PubMed:11447121, PubMed:1986252, PubMed:7760831, PubMed:7623826, PubMed:8946918, PubMed:8940068, PubMed:9341107, PubMed:9121459, PubMed:9727490, PubMed:9499401, PubMed:9535852, PubMed:12659875, PubMed:12917326, PubMed:15016915, PubMed:25963659, PubMed:26754925). In unstressed cells, is present in a HSP90-containing multichaperone complex that maintains it in a non-DNA-binding inactivated monomeric form (PubMed:9727490, PubMed:11583998, PubMed:16278218). Upon exposure to heat and other stress stimuli, undergoes homotrimerization and activates HSP gene transcription through binding to site-specific heat shock elements (HSEs) present in the promoter regions of HSP genes (PubMed:1871105, PubMed:1986252, PubMed:8455624, PubMed:7935471, PubMed:7623826, PubMed:8940068, PubMed:9727490, PubMed:9499401, PubMed:10359787, PubMed:11583998, PubMed:12659875, PubMed:16278218, PubMed:25963659, PubMed:26754925). Activation is reversible, and during the attenuation and recovery phase period of the HSR, returns to its unactivated form (PubMed:11583998, PubMed:16278218). Binds to inverted 5'-NGAAN-3' pentamer DNA sequences (PubMed:1986252, PubMed:26727489). Binds to chromatin at heat shock gene promoters (PubMed:25963659). Plays also several other functions independently of its transcriptional activity. Involved in the repression of Ras-induced transcriptional activation of the c-fos gene in heat-stressed cells (PubMed:9341107). Positively regulates pre-mRNA 3'-end processing and polyadenylation of HSP70 mRNA upon heat-stressed cells in a symplekin (SYMPK)-dependent manner (PubMed:14707147). Plays a role in nuclear export of stress-induced HSP70 mRNA (PubMed:17897941). Plays a role in the regulation of mitotic progression (PubMed:18794143). Plays also a role as a negative regulator of non-homologous end joining (NHEJ) repair activity in a DNA damage-dependent manner (PubMed:26359349). Involved in stress-induced cancer cell proliferation in a IER5-dependent manner (PubMed:26754925).</p> |



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| Form | Liquid |
| Conjugate | Non-conjugated |
| Storage Buffer | Rabbit IgG in 10mM phosphate buffered saline , pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02% sodium azide and 50% glycerol. |
| Purification Method | Affinity-chromatography |
| Isotype | Rabbit IgG |
| Clonality | Monoclonal |
| Alias | Heat shock factor protein 1, HSF 1, Heat shock transcription factor 1, HSF1 |
| Immunogen Species | Homo sapiens (Human) |
| Research Area | Tags & Cell Markers |
| Target Names | HSF1 |
| Clone No. | 2A7 |

Image

Western Blot

Positive WB detected in Hela whole cell lysate
 All lanes Phospho-HSF1 antibody at 0.8µg/ml
 Secondary
 Goat polyclonal to rabbit IgG at 1/50000 dilution
 Predicted band size: 82 KDa
 Observed band size: 82 KDa



Immunocytochemistry analysis of CSB-RA010791A326pHU diluted at 1:80 and staining in Hela cells performed on a Leica Bond™ system. The cells were fixed in 4% formaldehyde, permeabilized using 0.2% Triton X-100 and blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4? overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.

Usage

For Research Use Only. Not for use in diagnostic or therapeutic procedures.