

Product datasheet

Anti-HSF1 (phospho S326) antibody ab115702

★★★★★ [1 Abreviews](#) [8 References](#) [2 Images](#)

Overview

Product name	Anti-HSF1 (phospho S326) antibody
Description	Rabbit polyclonal to HSF1 (phospho S326)
Host species	Rabbit
Tested applications	Suitable for: WB
Species reactivity	Reacts with: Human, Recombinant fragment
Immunogen	Synthetic peptide corresponding to Human HSF1 (phospho S326).
Positive control	HeLa whole cell lysate (ab150035); HeLa whole cell lysate (ab150035) Heat-Shocked;
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C.
Storage buffer	Preservative: 0.09% Sodium azide Constituents: 49% PBS, 50% Glycerol (glycerin, glycerine)
Purity	Protein A purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab115702 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★★ (1)	1/1000. Detects a band of approximately 85-95 kDa (predicted molecular weight: 57 kDa). (ECL).

Target

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.

Sequence similarities

Belongs to the HSF family.

Domain

the 9aaTAD motif is a transactivation domain present in a large number of yeast and animal transcription factors.

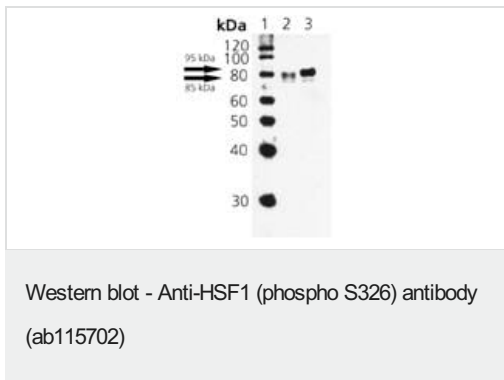
Post-translational modifications

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 transactivation and promotes HSP90 binding. Phosphorylation on Thr-142 also mediates transcriptional activity induced by heat. Phosphorylation on Ser-326 plays an important role in heat activation of HSF1 transcriptional activity. Sumoylated with SUMO1 and SUMO2 on heat-shock. Heat-inducible sumoylation occurs after 15 min of heat-shock, after which levels decrease and at 4 hours, levels return to control levels. Sumoylation has no effect on HSE binding nor on transcriptional activity. Phosphorylation on Ser-303 is a prerequisite for sumoylation.

Cellular localization

Cytoplasm. Nucleus. Cytoplasmic during normal growth. On activation, translocates to nuclear stress granules. Colocalizes with SUMO1 in nuclear stress granules.

Images



All lanes : Anti-HSF1 (phospho S326) antibody (ab115702) at 1/1000 dilution

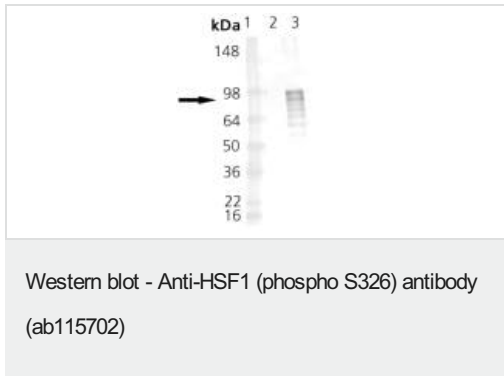
Lane 1 : MW marker

Lane 2 : HeLa cell lysate

Lane 3 : HeLa cell lysate Heat-Shocked (No recovery time)

Predicted band size: 57 kDa

ab115702 detects a band of 85-95kDa by Western blot depending on hyperphosphorylation of the native protein.



All lanes : Anti-HSF1 (phospho S326) antibody (ab115702) at 1/1000 dilution

Lane 1 : MW markers

Lane 2 : Recombinant HSF1

Lane 3 : Recombinant HSF1 (phospho)

Predicted band size: 57 kDa

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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