


# Anti-HSF1 antibody ab105086

## 2 图像

### 概述

产品名称	Anti-HSF1抗体
描述	兔多克隆抗体to HSF1
宿主	Rabbit
经测试应用	适用于: WB, ICC/IF
种属反应性	与反应: Human 预测可用于: Horse, Dog, Macaque monkey 
免疫原	Synthetic peptide corresponding to Human HSF1 aa 450 to the C-terminus conjugated to keyhole limpet haemocyanin. (Peptide available as <a href="#">ab117399</a> )
阳性对照	Recombinant Human HSF1 protein ( <a href="#">ab78795</a> ) can be used as a positive control in WB. This antibody gave a positive signal in the following human whole cell lysates: HeLa; MCF7; MDA MB 231; Jurkat; HepG2; Caco2; HEK293.
常规说明	<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&amp;As</p>

### 性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
存储溶液	pH: 7.40 Preservative: 0.02% Sodium azide Constituent: PBS
	Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.

纯度	Immunogen affinity purified
克隆	多克隆
同种型	IgG

## 应用

**The Abpromise guarantee**      **Abpromise™**承诺保证使用ab105086于以下的经测试应用

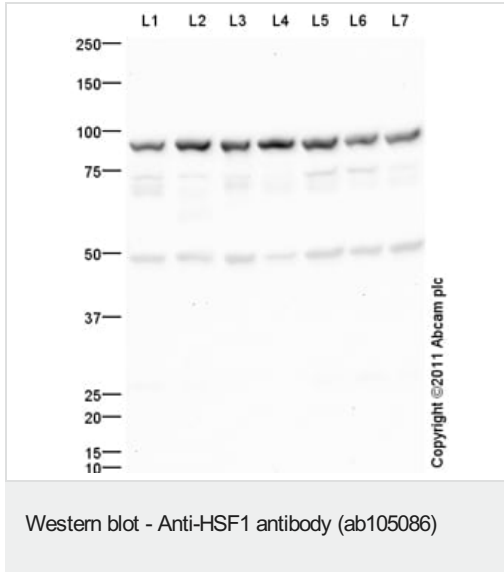
“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB		Use a concentration of 1 µg/ml. Detects a band of approximately 90 kDa (predicted molecular weight: 85 kDa).
ICC/IF		Use a concentration of 1 µg/ml.

## 靶标

功能	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.
序列相似性	Belongs to the HSF family.
结构域	the 9aaTAD motif is a transactivation domain present in a large number of yeast and animal transcription factors.
翻译后修饰	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.
细胞定位	Cytoplasm. Nucleus. Cytoplasmic during normal growth. On activation, translocates to nuclear stress granules. Colocalizes with SUMO1 in nuclear stress granules.

## 图片



**All lanes :** Anti-HSF1 antibody (ab105086) at 1 µg/ml

**Lane 1 :** HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate

**Lane 2 :** MCF7 (Human breast adenocarcinoma cell line) Whole Cell Lysate

**Lane 3 :** MDA-MB-231 (Human breast adenocarcinoma cell line) Whole Cell Lysate

**Lane 4 :** Jurkat (Human T cell lymphoblast-like cell line) Whole Cell Lysate

**Lane 5 :** HepG2 (Human hepatocellular liver carcinoma cell line) Whole Cell Lysate

**Lane 6 :** Caco 2 (Human colonic carcinoma cell line) Whole Cell Lysate

**Lane 7 :** HEK293 (Human embryonic kidney cell line) Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

#### Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (**ab97080**) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

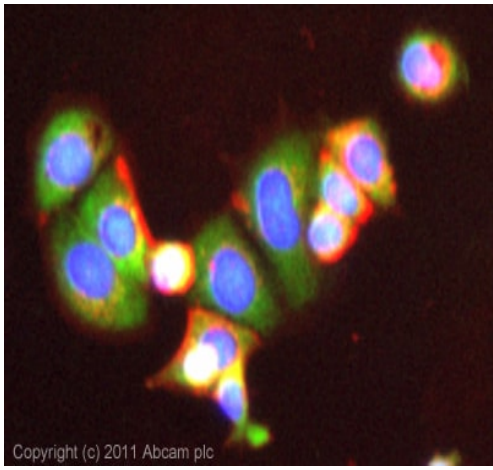
**Predicted band size:** 85 kDa

**Observed band size:** 90 kDa

**Additional bands at:** 50 kDa, 74 kDa. We are unsure as to the identity of these extra bands.

**Exposure time:** 20 minutes

The predicted molecular weight of HSF1 is 57 kDa (SwissProt), however we expect to observe a banding pattern around 85 kDa. Abcam welcomes customer feedback and would appreciate any comments regarding this product and the data presented above. Abcam recommends using milk as the blocking agent.



Immunocytochemistry/ Immunofluorescence - Anti-HSF1 antibody (ab105086)

ICC/IF image of ab105086 stained MCF7 cells. The cells were 100% methanol fixed (5 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab105086, 1µg/ml) overnight at +4°C. The secondary antibody (green) was **ab96899**, DyLight® 488 goat anti-rabbit IgG (H+L) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM. This antibody also gave a positive result in 100% methanol fixed (5 min) HeLa, Hek293 and HepG2 cells at 1µg/ml.

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

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