abcam

Product datasheet

Anti-HSF1 antibody ab105086

画像数 2

製品の概要

製品名 Anti-HSF1 antibody

製品の詳細 Rabbit polyclonal to HSF1

由来種 Rabbit

アプリケーション 適用あり: WB, ICC/IF

種交差性 交差種: Human

交差が予測される動物種: 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 ab117399)

ポジティブ・コントロール Recombinant Human HSF1 protein (ab78795) 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.

特記事項

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.

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

製品の特性

製品の状態 Liquid

保存方法 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.

バッファー 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.

1

精製度 Immunogen affinity purified

ポリ/モノ ポリクローナル

アイソタイプ lgG

アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab105086の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
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.

ターゲット情報

機能 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.

配列類似性 Belongs to the HSF family.

ドメイン the 9aaTAD motif is a transactivation domain present in a large number of yeast and animal

transcription factors.

翻訳後修飾 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.

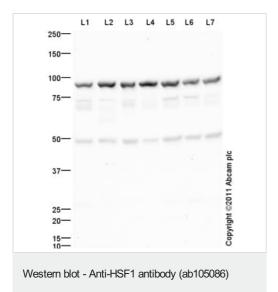
Sumoylated with SUMO1 and SUMO2 on heat-shock. Heat-inducible sumoylation occurs after 15 min of heat-shock, after which levels decrease and at 4 hours, levels return to control levels. Sumoylation has no effect on HSE binding nor on transcriptional activity. Phosphorylation on Ser-

303 is a prerequisite for sumoylation.

細胞内局在 Cytoplasm. Nucleus. Cytoplasmic during normal growth. On activation, translocates to nuclear

stress granules. Colocalizes with SUMO1 in nuclear stress granules.

画像



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 lgG H&L (HRP) preadsorbed (ab97080) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

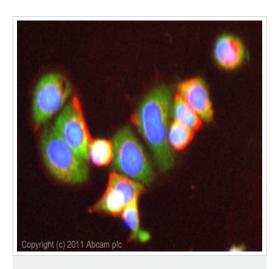
Predicted band size: 85 kDa Observed band size: 90 kDa

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 lgG (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"

Our Abpromise to you: Quality guaranteed and expert technical support

- · Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- · Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.co.jp/abpromise or contact our technical team.

Terms and conditions

Guarantee only valid for products bought direct from Abcam or one of our authorized distributors