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Datasheet for ABIN2484635  
**anti-HSF2 antibody (Atto 488)**

3 Images

Overview

Quantity:	100 µg
Target:	HSF2
Reactivity:	Mouse
Host:	Rat
Clonality:	Monoclonal
Conjugate:	This HSF2 antibody is conjugated to Atto 488
Application:	Western Blotting (WB), Immunofluorescence (IF), Immunocytochemistry (ICC), Antibody Array (AA)

Product Details

Immunogen:	Purified recombinant mouse HSF2 protein
Clone:	3E2
Isotype:	IgG1
Specificity:	Detects ~69 kDa.
Cross-Reactivity:	Cow, Dog, Guinea Pig, Hamster, Human, Monkey, Mouse, Pig, Rabbit, Rat, Sheep
Purification:	Protein G Purified

Target Details

Target:	HSF2
Alternative Name:	HSF2 ( <a href="#">HSF2 Products</a> )

## Target Details

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**Background:** HSF2, or heat shock factor 2, belongs to a family of Heat Shock transcription factors that activate the transcription of genes encoding products required for protein folding, processing, targeting, degradation, and function (2). The up-regulation of HSP (heat shock proteins) expression by stressors is achieved at the level of transcription through a heat shock element (HSE) and a transcription factor (HSF) (3, 4, 5). Most HSFs have highly conserved amino acid sequences. On all HSFs there is a DNA binding domain at the N-terminus. Hydrophobic repeats located adjacent to this binding domain are essential for the formation of active trimers. Towards the C-terminal region another short hydrophobic repeat exists, and is thought to be necessary for suppression of trimerization (6). There are two main heat shock factors, 1 and 2. Mouse HSF1 exists as two isoforms, however in higher eukaryotes HSF1 is found in a diffuse cytoplasmic and nuclear distribution in un-stressed cells. Once exposed to a multitude of stressors, it localizes to discrete nuclear granules within seconds. As it recovers from stress, HSF1 dissipates from these granules to a diffuse nucleoplasmic distribution. HSF2 on the other hand is similar to mouse HSF1, as it exists as two isoforms, the alpha form being more transcriptionally active than the smaller beta form (7, 8). Various experiments have suggested that HSF2 may have roles in differentiation and development (9, 10, 11).

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**Gene ID:** 15500

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**NCBI Accession:** [NP\\_001129036](#)

## Application Details

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**Application Notes:**

- WB (1:250)
- ICC/IF (1:200)
- optimal dilutions for assays should be determined by the user.

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**Comment:** 4 µg/ml of ABIN2484635 was sufficient for detection of HSF2 in 20 µg of heat shocked HeLa cell lysate by colorimetric immunoblot analysis using Rabbit anti-rat IgG: AP as the secondary antibody.

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**Restrictions:** For Research Use only

## Handling

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**Format:** Liquid

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**Concentration:** 1 mg/mL

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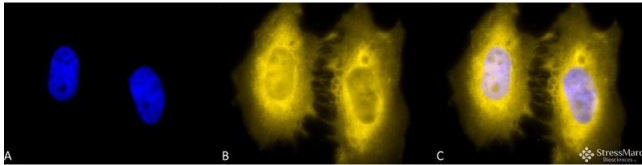
**Buffer:** PBS pH 7.4, 50 % glycerol, 0.09 % sodium azide, Storage buffer may change when conjugated

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## Handling

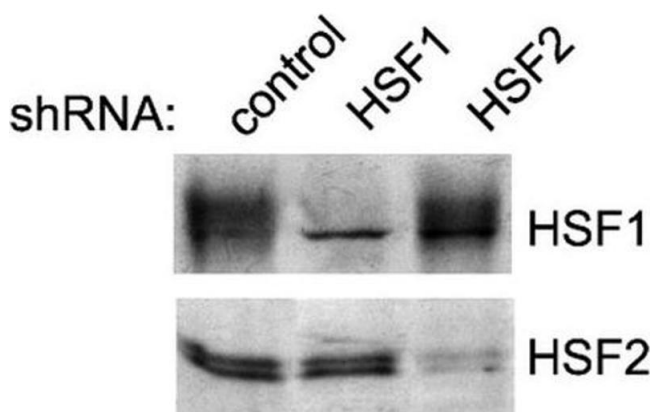
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C
Storage Comment:	Conjugated antibodies should be stored at 4°C

## Images



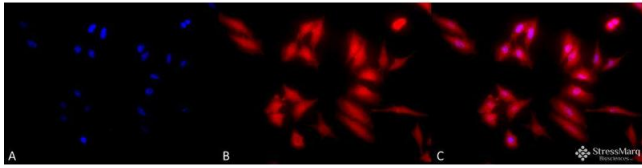
### Immunofluorescence (fixed cells)

**Image 1.** Immunocytochemistry/Immunofluorescence analysis using Rat Anti-HSF2 Monoclonal Antibody, Clone 3E2 . Tissue: Heat Shocked HeLa Cells. Species: Human. Fixation: 2% Formaldehyde for 20 min at RT. Primary Antibody: Rat Anti-HSF2 Monoclonal Antibody at 1:100 for 12 hours at 4°C. Secondary Antibody: R-PE Goat Anti-Rat (yellow) at 1:200 for 2 hours at RT. Counterstain: DAPI (blue) nuclear stain at 1:40000 for 2 hours at RT. Localization: Diffuse nuclear and cytoplasmic staining. Magnification: 100x. (A) DAPI (blue) nuclear stain. (B) Anti-HSF2 Antibody. (C) Composite.



### Western Blotting

**Image 2.** Western Blot analysis of Human K562 cell lysates showing detection of HSF2 protein using Rat Anti-HSF2 Monoclonal Antibody, Clone 3E2 . Primary Antibody: Rat Anti-HSF2 Monoclonal Antibody at 1:1000. Cells transiently transfected with control, HSF1 or HSF2 shRNA constructs. Courtesy of: Lea Sistonen, Abo Akademi University, Finland.



### Immunofluorescence (fixed cells)

**Image 3.** Immunocytochemistry/Immunofluorescence analysis using Rat Anti-HSF2 Monoclonal Antibody, Clone 3E2 . Tissue: Heat Shocked HeLa Cells. Species: Human. Fixation: 2% Formaldehyde for 20 min at RT. Primary Antibody: Rat Anti-HSF2 Monoclonal Antibody at 1:100 for 12 hours at 4°C. Secondary Antibody: APC Goat Anti-Rat (red) at 1:200 for 2 hours at RT. Counterstain: DAPI (blue) nuclear stain at 1:40000 for 2 hours at RT. Localization: Diffuse nuclear and cytoplasmic staining. Magnification: 20x. (A) DAPI (blue) nuclear stain. (B) Anti-HSF2 Antibody. (C) Composite.