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HSF1 Antibody
Catalog # ASM10468

Specification

HSF1 Antibody - Product Information

Application	ICC/IF
Primary Accession	Q00613
Other Accession	NP_005517.1
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal

Description
Rabbit Anti-Human HSF1 Polyclonal

Target/Specificity
Detects ~85kDa (unstressed cell lysates), and ~95kDa (heat shocked cell lysates).

Other Names
Heat shock factor 1 Antibody, Heat shock factor protein 1 Antibody, Heat shock transcription factor 1 Antibody, HSF 1 Antibody, hsf1 Antibody, HSF1_HUMAN Antibody, HSTF 1 Antibody, HSTF1 Antibody

Immunogen
Purified human HSF1 protein NM_005526.2

Purification
Protein A Purified

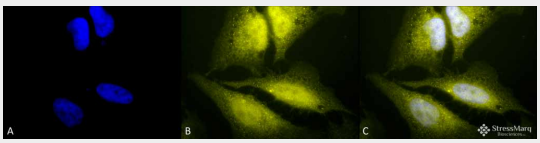
Storage	-20ºC

Storage Buffer
PBS pH7.4, 50% glycerol, 0.09% sodium azide

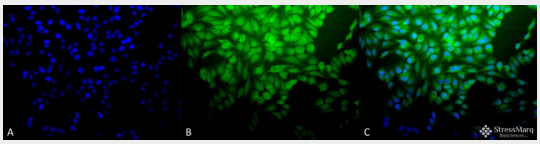
Shipping Temperature	Blue Ice or 4ºC

Certificate of Analysis
1 µg/ml of SPC-208 was sufficient for detection of HSF1 in 20 µg of heat shocked HeLa cell lysate by colorimetric immunoblot analysis using Rabbit anti-rat IgG: AP as the secondary antibody.

Cellular Localization
Cytoplasm | Nucleus



Immunocytochemistry/Immunofluorescence analysis using Rabbit Anti-HSF1 Polyclonal Antibody (ASM10468). Tissue: Heat Shocked HeLa Cells. Species: Human. Fixation: 2% Formaldehyde for 20 min at RT. Primary Antibody: Rabbit Anti-HSF1 Polyclonal Antibody (ASM10468) at 1:100 for 12 hours at 4°C. Secondary Antibody: R-PE Goat Anti-Rabbit (yellow) at 1:200 for 2 hours at RT. Counterstain: DAPI (blue) nuclear stain at 1:40000 for 2 hours at RT. Localization: Cytoplasm. Nucleus. Magnification: 100x. (A) DAPI (blue) nuclear stain. (B) Anti-HSF1 Antibody. (C) Composite. Heat Shocked at 42°C for 1h.



Immunocytochemistry/Immunofluorescence analysis using Rabbit Anti-HSF1 Polyclonal Antibody (ASM10468). Tissue: Heat Shocked HeLa Cells. Species: Human. Fixation: 2% Formaldehyde for 20 min at RT. Primary Antibody: Rabbit Anti-HSF1 Polyclonal Antibody (ASM10468) at 1:100 for 12 hours at 4°C. Secondary Antibody: FITC Goat Anti-Rabbit (green) at 1:200 for 2 hours at RT. Counterstain: DAPI (blue) nuclear stain at 1:40000 for 2 hours at RT. Localization: Cytoplasm. Nucleus. Magnification: 20x. (A) DAPI (blue) nuclear stain. (B) Anti-HSF1 Antibody. (C) Composite. Heat Shocked at 42°C for 1h.

HSF1 Antibody - Protocols

HSF1 Antibody - Background

HSF1, or heat shock factor 1, belongs to a family of Heat Shock transcription factors that

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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 nuceloplasmic 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 HFS2 may have roles in differentiation and development (9, 10, 11).

HSF1 Antibody - References

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