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Produktinformation

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Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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Anti-HSF1 Antibody [10H8]

Rat Anti-Mouse HSF1 Monoclonal IgG1
Catalog No. SMC-118

StressMarq Biosciences INC.
Discovery through partnership | Excellence through quality

Overview

Product Name

HSF1 Antibody

Description

Rat Anti-Mouse HSF1 Monoclonal IgG1

Species Reactivity

Human, Monkey, Mouse, Rat, Bovine, Guinea Pig (Cavia porcellus), Hamster, Rabbit

Applications

WB, ICC/IF, IP, ELISA, GS

Antibody Dilution

WB (1:1000), ICC/IF (1:200); optimal dilutions for assays should be determined by the user.

Host Species

Rat

Immunogen Species

Mouse

Immunogen

Purified recombinant mouse HSF1 protein, with epitope mapping to amino acids 378-395

Concentration

1 mg/ml

Conjugates

Alkaline Phosphatase, APC, ATTO 390, ATTO 488, ATTO 565, ATTO 594, ATTO 633, ATTO 655, ATTO 680, ATTO 700, Biotin, FITC, HRP, PE/ATTO 594, PerCP, RPE, Streptavidin, Unconjugated

Properties

Storage Buffer

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

Storage Temperature

-20ºC

Shipping Temperature

Blue Ice or 4ºC

Purification

Protein G Purified

Clonality

Monoclonal

Clone Number

10H8

Isotype

IgG1

Specificity

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

Cite This Product

Rat Anti-Mouse HSF1 Monoclonal, Clone 10H8 (StressMarq Biosciences Inc., Victoria BC CANADA, Catalog # SMC-118)

Certificate Of Analysis

1 µg/ml of SMC-118 was sufficient for detection of HSF1 in 20 µg of heat shocked HeLa cell lysate by ECL immunoblot analysis using Goat anti-rat IgG: HRP as the secondary antibody

Biological Description

Alternative Names

HSTF1 Antibody, Heat shock factor protein 1 Antibody, Heat shock transcription factor 1 Antibody, HSF 1 Antibody

Research Areas

Cancer, Heat Shock, Cardiovascular System, Cell Signaling, Epigenetics, Heart

Cellular Localization

Cytoplasm, Nucleus

Accession Number

NP_032322.1

Gene ID

15499

Swiss Prot

P38532

Scientific Background

HSF1, or heat shock factor 1, 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 HFS2 may have roles in

differentiation and development (9, 10, 11).

References

1. Cotto J.J., Fox S.G. and Morimoto R.I. (1997) J. Cell Science 110: 2925-2934.
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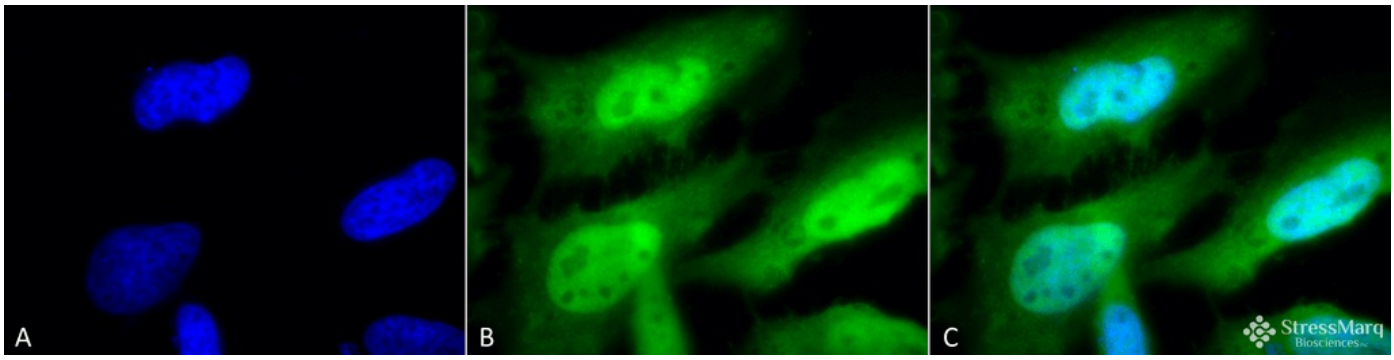
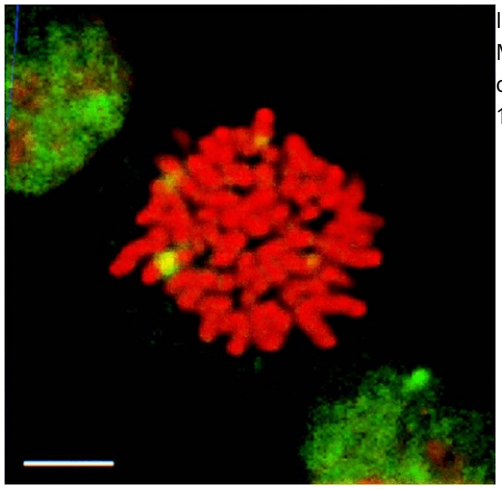
10. Sarge K.D., et al. (1994) Biol. Reprod. 50(6): 1334- 1343.
11. Murphy S.P., Gorzowski J.J., Sarge K.D. and Phillips B. (1994) Mol. Cell. Biol. 14(8):5309-5317.

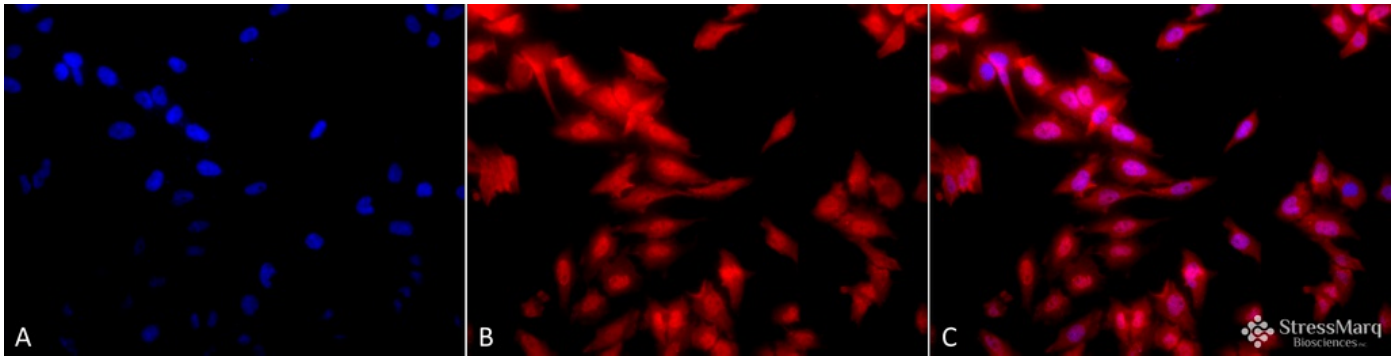
Product Images



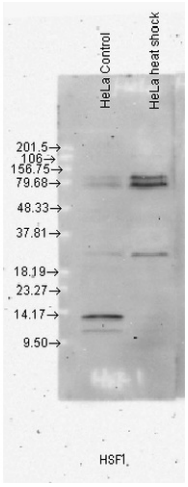
Immunocytochemistry/Immunofluorescence analysis using Rat Anti-HSF1 Monoclonal Antibody, Clone 10H8 (SMC-118). Tissue: Heat Shocked HeLa Cells. Species: Human. Fixation: 2% Formaldehyde for 20 min at RT. Primary Antibody: Rat Anti-HSF1 Monoclonal Antibody (SMC-118) at 1:100 for 12 hours at 4°C. Secondary Antibody: FITC Goat Anti-Rat (green) 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-HSF1 Antibody. (C) Composite.



Immunocytochemistry/Immunofluorescence analysis using Rat Anti-HSF1 Monoclonal Antibody, Clone 10H8 (SMC-118). Tissue: Heat Shocked mitotic HeLa cells. Species: Human. Primary Antibody: Rat Anti-HSF1 Monoclonal Antibody (SMC-118) at 1:1000. Courtesy of: Morimoto Lab, Northwestern University, USA.



Immunocytochemistry/Immunofluorescence analysis using Rat Anti-HSF1 Monoclonal Antibody, Clone 10H8 (SMC-118). Tissue: Heat Shocked HeLa Cells. Species: Human. Fixation: 2% Formaldehyde for 20 min at RT. Primary Antibody: Rat Anti-HSF1 Monoclonal Antibody (SMC-118) 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-HSF1 Antibody. (C) Composite.



Western Blot analysis of Human Heat Shocked HeLa cell lysates showing detection of HSF1 protein using Rat Anti-HSF1 Monoclonal Antibody, Clone 10H8 (SMC-118). Load: 15 µg protein. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Rat Anti-HSF1 Monoclonal Antibody (SMC-118) at 1:1000 for 2 hours at RT. Secondary Antibody: Sheep Anti-Mouse IgG: HRP for 1 hour at RT.

Product Citations (0)

Currently there are no citations for this product.

Reviews

There are no reviews yet.