

Product datasheet for **AM12012PU-S**

Hsf2 Rat Monoclonal Antibody [Clone ID: 3E2]

Product data:

Product Type:	Primary Antibodies
Clone Name:	3E2
Applications:	ELISA, EMSA, IF, IHC, IP, WB
Recommended Dilution:	ELISA. Western blot: 4 µg/ml was sufficient for detection of HSF2 of HeLa lysate. Gel Shift Assay (EMSA). Immunoprecipitation. Immunofluorescence. Immunohistochemistry on Frozen Sections.
Reactivity:	var.
Host:	Rat
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Purified recombinant Mouse SF2 protein
Specificity:	This antibody detects an ~69kDa protein in unstressed cells corresponding to HSF2 on SDS-PAGE immunoblots.
Formulation:	PBS, pH 7.2 State: Purified State: Liquid purified Ig fraction Stabilizer: 50% Glycerol Preservative: 0.09% Sodium Azide
Concentration:	lot specific
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	heat shock factor 2
Database Link:	P38533



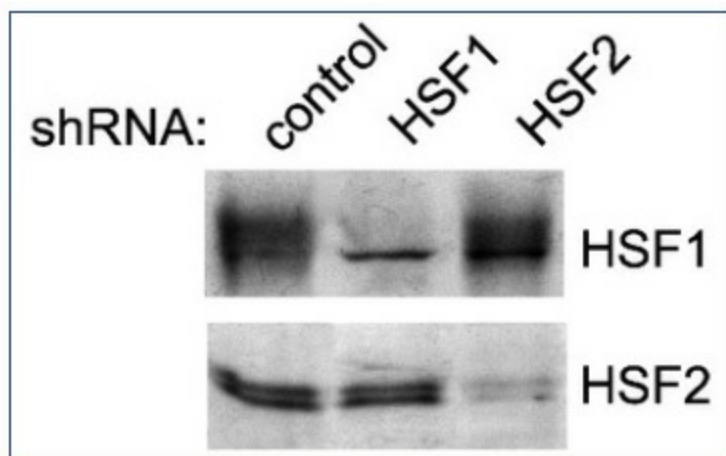
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Background:

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 Nterminus. 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).

Synonyms:

HSF-2, HSTF2

Product images:

Western blot analysis (K562 cells) transiently transfected with control, HSF1 or HSF2 shRNA constructs using HSF1, HSF2 (3E2) antibodies. Courtesy of Lea Sistonen, Abo Akademi University, Finland.