

Recombinant Human HSF1 Protein (Val15-Pro288), His tagged

Cat. No. HSF1-3369H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human HSF1 (Val15-Pro288) protein fused with His tag was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	Val15-Pro288
Description	Heat shock factor protein 1, also known as heat shock transcription factor 1, HSF1 and HSTF1, is a cytoplasm and nucleus protein which belongs to the HSF family. HSF1 is the major transcription factor of HSPs (heat shock proteins) in response to various stresses. Wild type HSF1 (heat shock transcriptional factor 1) is normally inactive. HSF1/HSTF1 is a 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. HSF1/HSTF1 protects cells and organisms against various types of stress, either by triggering a complex response that promotes cell survival or by triggering cell death when stress-induced alterations cannot be rescued. HSF1/HSTF1 is the key protein in regulating stress response. It can be activated under heat, oxidative or another stress conditions. Dominant-positive and dominant-negative HSF1 are two types of HSF1 mutants. Both of them gain the DNA binding activity in the absence of stress. In addition, dominant-positive HSF1 acquires transcriptional activity, which dominant-negative HSF1 does not acquire. HSF1/HSTF1 was also reported to contribute to cell resistance against

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	genotoxic stress, such as that caused by doxorubicin, an anticancer drug in common clinical use.
Molecular Mass	31.23 kDa
Purity	>90 % as determined by SDS-PAGE.
Notes	For research use only.
Storage	Use a manual defrost freezer and avoid repeated freeze thaw cycles. Store at 2 to 8 centigrade for one week. Store at -20 to -80 centigrade for twelve months from the date of receipt.
Storage Buffer	Supplied as solution form in PBS pH 7.5 or lyophilized from PBS pH 7.5.
Reconstitution	Reconstitute in sterile water for a stock solution.
Shipping	In general, proteins are provided as lyophilized powder/frozen liquid. They are shipped out with dry ice/blue ice unless customers require otherwise.

GENE INFORMATION

Gene Name	HSF1 heat shock transcription factor 1 [Homo sapiens (human)]
Official Symbol	HSF1
Synonyms	HSF1; heat shock transcription factor 1; heat shock factor protein 1; HSTF1; HSF 1; HSTF 1;
Gene ID	3297

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mRNA Refseq	NM_005526
Protein Refseq	NP_005517
MIM	140580
UniProt ID	Q00613

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