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Product Information

HSF1, GST-tagged, human
recombinant, expressed in *E. coli* cells

Catalog Number **SRP5188**
Storage Temperature –70 °C

Synonym: HSTF1

Product Description

HSF1 is a member of the heat shock transcription factor family. Protein-damaging stress leads to the activation of HSF1, which binds to upstream regulatory sequences in the promoters of heat shock genes leading to enhanced heat shock gene expression.[1] The activation of HSF1 proceeds through a multi-step pathway, involving a monomer-to-trimer transition, nuclear accumulation, and extensive post-translational modifications. HSF1 activity is regulated at different levels by heat shock proteins and co-chaperones and is modulated further by a number of mechanisms involving other stress-regulated aspects of cell metabolism.[2]

Recombinant, full-length, human HSF1 was expressed in *E.coli* cells using an N-terminal GST tag. The gene accession number is NM_005526. Recombinant protein stored in 50 mM Tris-HCl, pH 7.5, 150 mM NaCl, 10 mM glutathione, 0.1 mM EDTA, 0.25 mM DTT, 0.1 mM PMSF, and 25% glycerol.

Molecular mass: ~96 kDa

Purity: 70–95% (SDS-PAGE, see Figure 1)

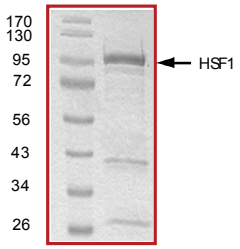
Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

The product ships on dry ice and storage at –70 °C is recommended. After opening, aliquot into smaller quantities and store at –70 °C. Avoid repeated handling and multiple freeze/thaw cycles.

Figure 1.
SDS-PAGE Gel of Typical Lot
70–95% (densitometry)



References

1. Pirkkala, L. et al., Roles of the heat shock transcription factors in regulation of the heat shock response and beyond. FASEB J., **15(7)**, 1118-31 (2001).
2. Voellmy, R. et al., Feedback regulation of the heat shock response. Handb. Exp. Pharmacol., **172**, 43-68 (2006).

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