PRODUCT INFORMATION

Expression system E.coli

Domain 1-529aa

UniProt No. Q00613

NCBI Accession No. NP_005517.1

Alternative Names

Heat shock factor 1, Heat shock transcription factor 1(HSTF), Heat shock factor 1, HSF1, Heat shock factor 1 Heat shock factor 1, HSTF 1.

PRODUCT SPECIFICATION

Molecular Weight

59.4 kDa (549aa)

Concentration

1mg/ml (determined by Bradford assay)

Formulation

Liquid. In Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol, 0.1mM PMSF

Purity > 80% by SDS-PAGE

Tag His-Tag

Application SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

Heat shock factor 1 (HSF1) is a major transactivator of heat shock proteins in response to environmental changes, and it is also involved in oogenesis, spermatogenesis, and placental development. Best known for its involvement in heat shock response, Hsf1p regulates the transcription of hundreds of targets, including genes involved in protein folding, detoxification, energy generation, carbohydrate metabolism, and cell wall organization. Recombinant HSF1, fused to His tag, was expressed in E. coli and purified by using conventional



chromatography techniques.

Amino acid Sequence

<MGSSHHHHHH SSGLVPRGSH> MDLPVGPGAA GPSNVPAFLT KLWTLVSDPD TDALICWSPS GNSFHVFDQG QFAKEVLPKY FKHNNMASFV RQLNMYGFRK VVHIEQGGLV KPERDDTEFQ HPCFLRGQEQ LLENIKRKVT SVSTLKSEDI KIRQDSVTKL LTDVQLMKGK QECMDSKLLA MKHENEALWR EVASLRQKHA QQQKVVNKLI QFLISLVQSN RILGVKRKIP LMLNDSGSAH SMPKYSRQFS LEHVHGSGPY SAPSPAYSSS SLYAPDAVAS SGPIISDITE LAPASPMASP GGSIDERPLS SSPLVRVKEE PPSPPQSPRV EEASPGRPSS VDTLLSPTAL IDSILRESEP APASVTALTD ARGHTDTEGR PPSPPPTSTP EKCLSVACLD KNELSDHLDA MDSNLDNLQT MLSSHGFSVD TSALLDLFSP SVTVPDMSLP DLDSSLASIQ ELLSPQEPPR PPEAENSSPD SGKQLVHYTA QPLFLLDPGS VDTGSNDLPV LFELGEGSYF SEGDGFAEDP TISLLTGSEP PKAKDPTVS

General References

Turk V, et al (1991) FEBS Lett. 285 (2): 213-9. Jarvinen M, et al, (1988) Acta Histochem. 82 (1): 5-18

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.