PRODUCT INFORMATION

Expression system E.coli

Domain 1-291aa

UniProt No. P29084

NCBI Accession No. NP_002086

Alternative Names Transcription initiation factor IIE subunit beta, FE, TF2E2, TFIIE-B

PRODUCT SPECIFICATION

Molecular Weight 35.6 kDa (315aa) confirmed by MALDI-TOF

Concentration 1mg/ml (determined by Bradford assay)

Formulation Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 30% glycerol, 0.1M NaCl, 1mM DTT

Purity > 90% 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

GTF2E2, also known as TFIIE, is essential for transcription initiation by RNA polymerase II in conjunction with other general factors. TFIIE is a heterotetramer containing two subunits of relative molecular mass 57, 000 (TFIIEalpha) and two of 34, 000 (TFIIE-beta). TFIIE-beta is required in conjunction with TFIIE-alpha for transcription initiation. GTF2E2 recruits TFIIH to the initiation complex and stimulates the RNA polymerase II C-terminal domain kinase and DNA-dependent ATPase activities of TFIIH. Both TFIIH and TFIIE are required for promoter clearance by RNA polymerase. Recombinant human GTF2E2 protein, fused to His-tag at N-terminus, was



expressed in E. coli and purified by using conventional chromatography.

Amino acid Sequence

<MGSSHHHHHH SSGLVPRGSH MGSH>MDPSLL RERELFKKRA LSTPVVEKRS ASSESSSSSS KKKKTKVEHG GSSGSKQNSD HSNGSFNLKA LSGSSGYKFG VLAKIVNYMK TRHQRGDTHP LTLDEILDET QHLDIGLKQK QWLMTEALVN NPKIEVIDGK YAFKPKYNVR DKKALLRLLD QHDQRGLGGI LLEDIEEALP NSQKAVKALG DQILFVNRPD KKKILFFNDK SCQFSVDEEF QKLWRSVTVD SMDEEKIEEY LKRQGISSMQ ESGPKKVAPI QRRKKPASQK KRRFKTHNEH LAGVLKDYSD ITSSK

General References

Kang S.-W., et al. (2000) Genes Cells. 5:251-263 Liu L., et al. (2009) J. Biol. Chem. 284:5165-5174

DATA

SDS-PAGE



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