# **PRODUCT INFORMATION**

**Expression system** E.coli

**Domain** 1-310aa

**UniProt No.** P22415

NCBI Accession No. NP\_001263302

## **Alternative Names**

Upstream transcription factor 1, Upstream stimulatory factor 1, uEF, MLTFI, MLTF, Major late transcription factor 1, HYPLIP1, FCHL1, FCHL1, Class B basic helix-loop-helix protein 11, bHLHb11

## **PRODUCT SPECIFICATION**

### **Molecular Weight**

35.9 kDa (333aa) confirmed by MALDI-TOF

### Concentration

0.25mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.15M NaCl, 20% glycerol, 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

USF1 is a member of the basic helix-loop-helix leucine zipper family, and can function as a cellular transcription factor. USF1 can activate transcription through pyrimidine-rich initiator (Inr) elements and E-box motifs. This gene has been linked to familial combined hyperlipidemia (FCHL). Alternative splicing of this gene results in multiple transcript variants. A related pseudogene has been defined on chromosome 21. Recombinant human USF1 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional



chromatography techniques.

### **Amino acid Sequence**

<MGSSHHHHHH SSGLVPRGSH MGS>MKGQQKT AETEEGTVQI QEGAVATGED PTSVAIASIQ SAATFPDPNV KYVFRTENGG QVMYRVIQVS EGQLDGQTEG TGAISGYPAT QSMTQAVIQG AFTSDDAVDT EGTAAETHYT YFPSTAVGDG AGGTTSGSTA AVVTTQGSEA LLGQATPPGT GQFFVMMSPQ EVLQGGSQRS IAPRTHPYSP KSEAPRTTRD EKRRAQHNEV ERRRRDKINN WIVQLSKIIP DCSMESTKSG QSKGGILSKA CDYIQELRQS NHRLSEELQG LDQLQLDNDV LRQQVEDLKN KNLLLRAQLR HHGLEVVIKN DSN

### **General References**

Rahaus M., et al. (2003) J. Gen. Virol. 84:2957-2967 Pajukanta P., et al. (2004) Nat. Genet. 36:371-376

## DATA

#### **SDS-PAGE**



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