

TFIIIE α ^{GST}, p56

Transcription Factor IIE, α -subunit
human, recombinant, *E. coli*

Cat. No.	Amount
PR-788	10 μ g

For *in vitro* use only
Quality guaranteed for 12 months
Store at -80°C

Avoid freeze / thaw cycles

Form

Liquid. Supplied in 20 mM Tris-HCl pH 8.0, 100 mM KCl, 0.2 mM EDTA, 1 mM DTT and 20% glycerol.

Activity

100 ng are sufficient for a protein-protein interaction assay.

Purity

> 95% by SDS-PAGE

Description

The human Transcription Factor IIE (TFIIIE) is composed of 56 kDa (α) and 34 kDa (β) subunits and is shown to be a heterotetramer. The 56 kDa subunit contains a region similar to a zinc-binding domain and a region sharing homology with the catalytic loop of a kinase domain. TFIIIE binds to RNA Polymerase II in solution and joins the preinitiation complex probably concomitant with RNA Polymerase II and TFIIF.

The fusion protein is purified from an *E. coli* strain that contains the coding sequence of human TFIIIE α -subunit under the control of a T7 promoter.

GST-TFIIIE α has been used for protein-protein interaction assays.

Selected References:

Ohkuma *et al.* (1990) Factors involved in specific transcription by mammalian RNA polymerase II: purification and characterization of general transcription factor TFIIIE. *Proc. Natl. Acad. Sci. USA* **87**:9163.

Inostroza *et al.* (1991) Factors involved in specific transcription by mammalian RNA polymerase II. Purification and functional analysis of general transcription factor IIE. *J. Biol. Chem.* **266**:9304.

Peterson *et al.* (1991) Structure and functional properties of human general transcription factor IIE. *Nature* **354**:369.

Flores *et al.* (1990) Factors involved in specific transcription by mammalian RNA polymerase II. Purification and subunit composition of transcription factor IIF. *J. Biol. Chem.* **265**:5629.

Maldonado *et al.* (1996) Purification of human RNA polymerase II and general transcription factors. *Methods Enzymol.* **274**:72.

Kaludov *et al.* (2000) MeCP2 driven transcriptional repression *in vitro*: selectivity for methylated DNA, action at a distance and contacts with the basal transcription machinery. *Nucleic Acids Res.* **28**:1921.