

Recombinant TFIIA α/β protein

Catalog No: 31330

Lot No: 01110001

Expressed In: *E. coli*

Quantity: 10 μ g

Concentration: 0.4 μ g/ μ l

Source: Human

Buffer Contents: 10 μ g recombinant TFIIA protein is provided in 20 mM Tris-HCl (pH7.3), 300 mM KCl, 0.2 mM EDTA and 20% glycerol.

Background: TFIIA (also known as TF2A1, GTF2A1, general transcription factor IIA subunit 1). TFIIA is a component of RNA polymerase II transcription complex. TFIIA associates with TATA-binding subunit (TBP) to regulate transcriptional activity. TFIIA binds directly to TBP and stabilizes its binding to DNA, perhaps through direct contacts of its own with the DNA. TFIIA acts as an anti-repressor, stabilizing TFIID binding by blocking repressors of transcription that inhibit binding of other transcription factors or that remove TBP from the DNA. Activation of transcription may be dependent on this TFIIA function. TFIIA is comprised of multiple subunits, TFIIA1 and TFIIA2. TFIIA1 has two subunits, TFIIA alpha and TFIIA beta, which are processed from the same polypeptide precursor.

Protein Details: Recombinant TFIIA protein was expressed in *E. coli* as the full-length human protein (accession number CAA54442) with an N-terminal FLAG-Tag. The molecular weight of the protein is ~55 kDa.

Application Notes: Recombinant TFIIA protein is suitable for use in *in vitro* transcription assays. We recommend to start with a range of protein concentrations (*e.g.* 5 ng, 50 ng, and 500 ng) to determine the optimal amount needed for each *in vitro* transcription assay.

Storage and Guarantee: Lyophilized proteins can be stored at -20°C or -80°C, preferably desiccated. Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is guaranteed for 6 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.