

TFIID (C-8): sc-374035

BACKGROUND

In eukaryotic systems, initiation of transcription from protein-coding genes is a complex process requiring RNA polymerase II and broad families of auxiliary transcription factors. Such factors can be divided into two major functional classes: the basal factors that are required for transcription of all Pol II genes, including TFIIA, TFIIB, TFIID, TFIIIE, TFIIF and TFIIF; and sequence-specific factors that regulate gene expression. The basal transcription factors and Pol II form a specific multiprotein complex near the transcription start site by interacting with core promoter elements such as the TATA box generally located 25-30 base pairs upstream of the transcription start site. Binding of TFIID to the TATA element initiates assembly of the other factors into a pre-initiation complex. The TATA-binding subunit of TFIID (designated TFIIDt or TBP) from higher eukaryotes contains a highly conserved 180 amino acid C-terminal domain.

CHROMOSOMAL LOCATION

Genetic locus: TBP (human) mapping to 6q27; Tbp (mouse) mapping to 17 A2.

SOURCE

TFIID (C-8) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 12-37 at the N-terminus of TFIID of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-374035 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-374035 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

TFIID (C-8) is recommended for detection of TFIID (TBP) p36 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

TFIID (C-8) is also recommended for detection of TFIID (TBP) p36 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for TFIID siRNA (h): sc-29503, TFIID siRNA (m): sc-36648, TFIID shRNA Plasmid (h): sc-29503-SH, TFIID shRNA Plasmid (m): sc-36648-SH, TFIID shRNA (h) Lentiviral Particles: sc-29503-V and TFIID shRNA (m) Lentiviral Particles: sc-36648-V.

TFIID (C-8) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

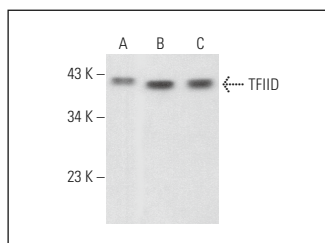
Molecular Weight of TFIID: 36 kDa.

Positive Controls: AN3 CA cell lysate: sc-24662, U-698-M whole cell lysate: sc-364799 or NIH/3T3 whole cell lysate: sc-2210.

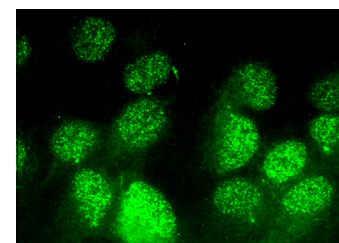
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



TFIID (C-8): sc-374035. Western blot analysis of TFIID expression in SK-N-MC nuclear extract (A) and AN3 CA (B) and U-698-M (C) whole cell lysates.



TFIID (C-8): sc-374035. Immunofluorescence staining of formalin-fixed Hep G2 cells showing nuclear localization.

SELECT PRODUCT CITATIONS

- Nayebosadri, A. and Ji, J.Y. 2013. Endothelial nuclear lamina is not required for glucocorticoid receptor nuclear import but does affect receptor-mediated transcription activation. *Am. J. Physiol., Cell Physiol.* 305: C309-C322.
- Carias, K.V., et al. 2020. A MAGEL2-deubiquitinase complex modulates the ubiquitination of circadian rhythm protein CRY1. *PLoS ONE* 15: e0230874.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.



See **TFIID (TBP) (58C9): sc-421** for TFIID antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.