

TFIID (1TB18): sc-56794

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 (1TB18) is a mouse monoclonal antibody raised against a synthetic TFIID peptide 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.

APPLICATIONS

TFIID (1TB18) is recommended for detection of TFIID of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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 immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

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.

Molecular Weight of TFIID: 36 kDa.

Positive Controls: F9 cell lysate: sc-2245, Neuro-2A whole cell lysate: sc-364185 or C6 whole cell lysate: sc-364373.

STORAGE

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

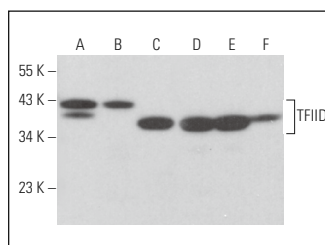
PROTOCOLS

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

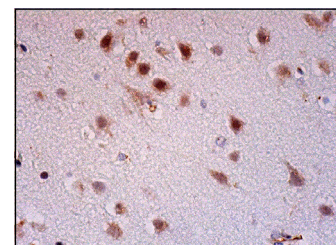
RECOMMENDED SUPPORT REAGENTS

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. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



TFIID (1TB18): sc-56794. Western blot analysis of TFIID expression in K-562 (A) and HEL 92.1.7 (B) nuclear extracts and SK-N-SH (C), Neuro-2A (D), F9 (E) and C6 (F) whole cell lysates.



TFIID (1TB18): sc-56794. Immunoperoxidase staining of formalin fixed, paraffin-embedded human cerebral cortex tissue showing nuclear staining of neuronal cells and glial cells.

SELECT PRODUCT CITATIONS

1. Renaud, S.J., et al. 2015. OVO-like 1 regulates progenitor cell fate in human trophoblast development. *Proc. Natl. Acad. Sci. USA* 112: E6175-E6184.
2. Guantes, R., et al. 2015. Global variability in gene expression and alternative splicing is modulated by mitochondrial content. *Genome Res.* 25: 633-644.
3. Chakraborty, D., et al. 2016. HIF-KDM3A-MMP12 regulatory circuit ensures trophoblast plasticity and placental adaptations to hypoxia. *Proc. Natl. Acad. Sci. USA* 113: E7212-E7221.
4. Milosevic, V., et al. 2020. Wnt/IL-1β/IL-8 autocrine circuitries control chemoresistance in mesothelioma initiating cells by inducing ABCB5. *Int. J. Cancer* 146: 192-207.

RESEARCH USE

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



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.