

TFIIF RAP 74 (C-18): sc-235

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, TFII E, TFIIF and TFIIH; 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. TFIIF, a heteromer composed of a small (RAP 30) and a large (RAP 74) subunit, is required for RNA polymerase II to assemble into a preinitiation complex formed by promoter DNA and the general factors TFIID, TFIIA and TFIIB. In addition, TFIIF stimulates transcription elongation by RNA polymerase II.

CHROMOSOMAL LOCATION

Genetic locus: GTF2F1 (human) mapping to 19p13.3; Gtf2f1 (mouse) mapping to 17 D.

SOURCE

TFIIF RAP 74 (C-18) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of TFIIF RAP 74 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-235 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-235 X, 200 µg/0.1 ml.

APPLICATIONS

TFIIF RAP 74 (C-18) is recommended for detection of TFIIF RAP 74 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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

TFIIF RAP 74 (C-18) is also recommended for detection of TFIIF RAP 74 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for TFIIF RAP 74 siRNA (h): sc-38523, TFIIF RAP 74 siRNA (m): sc-38524, TFIIF RAP 74 shRNA Plasmid (h): sc-38523-SH, TFIIF RAP 74 shRNA Plasmid (m): sc-38524-SH, TFIIF RAP 74 shRNA (h) Lentiviral Particles: sc-38523-V and TFIIF RAP 74 shRNA (m) Lentiviral Particles: sc-38524-V.

TFIIF RAP 74 (C-18) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

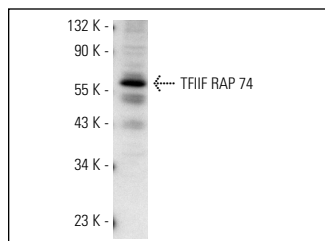
Molecular Weight of TFIIF RAP 74: 74 kDa.

Positive Controls: NIH/3T3 nuclear extract: sc-2138.

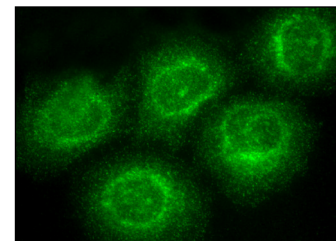
STORAGE

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

DATA



TFIIF RAP 74 (C-18): sc-235. Western blot analysis of TFIIF RAP 74 expression in NIH/3T3 nuclear extract.



TFIIF RAP 74 (C-18): sc-235. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear and cytoplasmic localization.

SELECT PRODUCT CITATIONS

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- Kim, S.J., et al. 2007. The regulatory effect of SC-236 (4-[5-(4-chlorophenyl)-3-(trifluoromethyl)-1-pyrazol-1-yl]benzenesulfonamide) on stem cell factor induced migration of mast cells. *Toxicol. Appl. Pharmacol.* 220: 138-145.
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- Zhang, H.M., et al. 2008. Mitogen-induced recruitment of ERK and MSK to SRE promoter complexes by ternary complex factor Elk-1. *Nucleic Acids Res.* 36: 2594-2607.
- Akhtar, W. and Veenstra, G.J. 2009. TBP2 is a substitute for TBP in *Xenopus* oocyte transcription. *BMC Biol.* 7: 45.
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- Guantes, R., et al. 2015. Global variability in gene expression and alternative splicing is modulated by mitochondrial content. *Genome Res.* 25: 633-644.

RESEARCH USE

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