

TFIIA- γ (N-19): sc-5316

BACKGROUND

Initiation of transcription from protein-coding genes in eukaryotes is a complex process that requires RNA polymerase II, as well as families of basal transcription factors. Binding of the factor TFIID (TBP) to the TATA box is believed to be the first step in the formation of a multiprotein complex containing several additional factors, including TFIIA, TFIIB, TFII E, TFIIF and TFIIFH. Recognition of the TATA binding element by TBP, one of the first steps in transcription initiation, may be regulated by TFIIA. TFIIA consists of three subunits designated TFIIA- α , TFIIA- β and TFIIA- γ , and it interacts with both TBP and a TAF (TBP-associated factor). It has been demonstrated that the basic region of TBP is essential for TFIIA-dependent function of TBP.

CHROMOSOMAL LOCATION

Genetic locus: GTF2A2 (human) mapping to 15q22.2; Gtf2a2 (mouse) mapping to 9 D.

SOURCE

TFIIA- γ (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of TFIIA- γ of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-5316 P, (100 μ g 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-5316 X, 200 μ g/0.1 ml.

RESEARCH USE

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

APPLICATIONS

TFIIA- γ (N-19) is recommended for detection of TFIIA- γ of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

TFIIA- γ (N-19) is also recommended for detection of TFIIA- γ in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for TFIIA- γ siRNA (h): sc-36645, TFIIA- γ siRNA (m): sc-36646, TFIIA- γ shRNA Plasmid (h): sc-36645-SH, TFIIA- γ shRNA Plasmid (m): sc-36646-SH, TFIIA- γ shRNA (h) Lentiviral Particles: sc-36645-V and TFIIA- γ shRNA (m) Lentiviral Particles: sc-36646-V.

TFIIA- γ (N-19) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

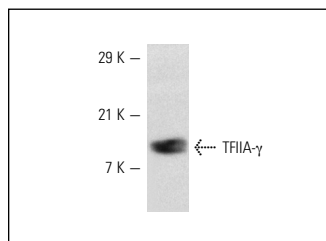
Molecular Weight of TFIIA- γ : 12 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210.

STORAGE

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

DATA



TFIIA- γ (N-19): sc-5316. Western blot analysis of TFIIA- γ expression in NIH/3T3 whole cell lysate.

SELECT PRODUCT CITATIONS

1. Metivier, R., et al. 2003. Estrogen receptor- α directs ordered, cyclical and combinatorial recruitment of co-factors on a natural target promoter. *Cell* 115: 751-763.
2. Wang, G., et al. 2005. Mediator requirement for both recruitment and postrecruitment steps in transcription initiation. *Mol. Cell* 17: 683-694.
3. Thiaville, M.M., et al. 2008. Activated transcription via mammalian amino acid response elements does not require enhanced recruitment of the Mediator complex. *Nucleic Acids Res.* 36: 5571-5580.
4. Yu, S., et al. 2008. General transcription factor IIA- γ increases osteoblast-specific osteocalcin gene expression via activating transcription factor 4 and runt-related transcription factor 2. *J. Biol. Chem.* 283: 5542-5553.
5. Wang, W., et al. 2013. Mediator MED23 regulates basal transcription *in vivo* via an interaction with P-TEFb. *Transcription* 4: 39-51.

PROTOCOLS

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