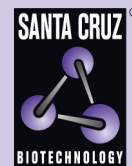


TFIIH p89 (S-19): sc-293



The Power to Question

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, TFIIE, TFIIH and TFIIF. TFIIH (or BTF2) is a multisubunit transcription/DNA repair factor that possesses several enzymatic activities. The core of TFIIH is composed of five subunits, designated p89 (XPB or ERCC3), p62, p52, p44 and p34. Additional subunits of the TFIIH complex are p80 (XPD or ERCC2) and the ternary kinase complex composed of Cdk7, cyclin H and Mat1. Both p89 and p80 have ATP-dependent helicase activity. The p62, p52 and p44 subunits have been shown to be involved in nucleotide excision repair.

CHROMOSOMAL LOCATION

Genetic locus: ERCC3 (human) mapping to 2q14.3; Ercc3 (mouse) mapping to 18 B1.

SOURCE

TFIIH p89 (S-19) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of TFIIH p89 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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-293 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-293 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TFIIH p89 (S-19) is recommended for detection of TFIIH p89 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).

Suitable for use as control antibody for TFIIH p89 siRNA (h): sc-36655, TFIIH p89 siRNA (m): sc-36656, TFIIH p89 shRNA Plasmid (h): sc-36655-SH, TFIIH p89 shRNA Plasmid (m): sc-36656-SH, TFIIH p89 shRNA (h) Lentiviral Particles: sc-36655-V and TFIIH p89 shRNA (m) Lentiviral Particles: sc-36656-V.

TFIIH p89 (S-19) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of TFIIH p89: 89 kDa.

Positive Controls: C32 nuclear extract: sc-2136, TFIIH p89 (m2): 293T Lysate: sc-124011 or A-431 nuclear extract: sc-2122.

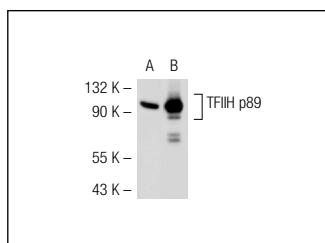
STORAGE

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

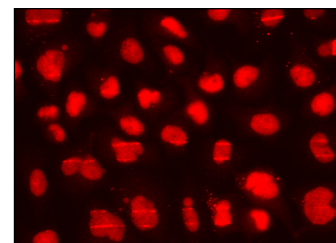
RESEARCH USE

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

DATA



TFIIH p89 (S-19): sc-293. Western blot analysis of TFIIH p89 expression in non-transfected: sc-117752 (A) and mouse TFIIH p89 transfected: sc-124011 (B) 293T whole cell lysates.



TFIIH p89 (S-19): sc-293. Immunofluorescence staining of formalin-fixed, UVA laser-microirradiated HeLa cells showing nuclear staining of cells with DNA damage. Kindly provided by Yang Xiang, Ph.D., Division of Newborn Medicine, Boston Childrens Hospital, Cell Biology Department, Harvard Medical School.

SELECT PRODUCT CITATIONS

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