SANTA CRUZ BIOTECHNOLOGY, INC.

UBF (K-17): sc-12427

BACKGROUND

The transcription of ribosomal RNA genes by RNA polymerase I (Pol I) is tightly coordinated with the growth state of the cell. In addition to Pol I, transcription of ribosomal genes requires the *trans*-activating factor UBF (upstream binding factor). UBF functions by binding to DNA elements within the RNA gene promoter and enhancer regions and directly associating with Pol I, tethering it to the promoter complex. Two UBF proteins arise from the same gene as a result of alternative mRNA splicings. UBF activity is regulated by several dependent casein kinase II phosphorylates at the carboxy terminus of UBF on serine residues. The retinoblastoma susceptibility gene product, Rb, when not bound to E2F family members, inhibits UBF activity. Expression of RNA may also be negatively regulated by the Ku antigens.

CHROMOSOMAL LOCATION

Genetic locus: UBTF (human) mapping to 17q21.31; Ubtf (mouse) mapping to 11 D.

SOURCE

UBF (K-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of UBF 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-12427 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-12427 X, 200 µg/0.1 ml.

APPLICATIONS

UBF (K-17) is recommended for detection of UBF1 and UBF2 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).

UBF (K-17) is also recommended for detection of UBF1 and UBF2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for UBF siRNA (h): sc-29514, UBF siRNA (m): sc-29515, UBF shRNA Plasmid (h): sc-29514-SH, UBF shRNA Plasmid (m): sc-29515-SH, UBF shRNA (h) Lentiviral Particles: sc-29514-V and UBF shRNA (m) Lentiviral Particles: sc-29515-V.

UBF (K-17) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of UBF1 isoform: 97 kDa.

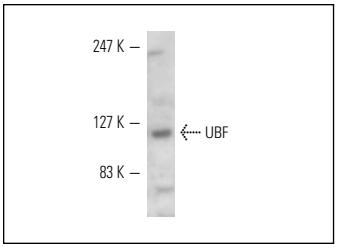
Molecular Weight of UBF2 isoform: 94 kDa.

Positive Controls: A-431 nuclear extract: sc-2122, KNRK nuclear extract: sc-2141 or HeLa nuclear extract: sc-2120.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



UBF (K-17): sc-12427. Western blot analysis of UBF expression in PMA-induced KNRK nuclear extract.

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 or our catalog for detailed protocols and support products.