

UBF (H-300): sc-9131

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 two Ku antigens.

CHROMOSOMAL LOCATION

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

SOURCE

UBF (H-300) is a rabbit polyclonal antibody raised against amino acids 1-220 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.

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-9131 X, 200 µg/0.1 ml.

APPLICATIONS

UBF (H-300) 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 (H-300) 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 (H-300) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of UBF isoforms: 94/97 kDa.

Positive Controls: SW480 cell lysate: sc-2219, KNRK nuclear extract: sc-2141 or PC-3 nuclear extract: sc-2152.

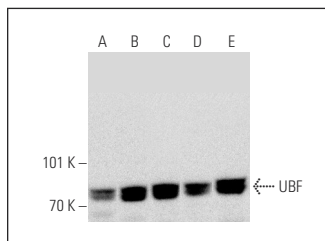
STORAGE

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

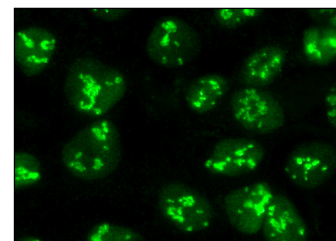
RESEARCH USE

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

DATA



UBF (H-300): sc-9131. Western blot analysis of UBF expression in SW480 (A), KNRK (B), PC-3 (C), Hep G2 (D) and TH-1 (E) nuclear extracts.



UBF (H-300): sc-9131. Immunofluorescence staining of formalin-fixed Hep G2 cells showing nucleolar localization.

SELECT PRODUCT CITATIONS

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- Pérez-Castro, A.J., et al. 2012. Rad9B responds to nucleolar stress through ATR and JNK signalling, and delays the G₁-S transition. *J. Cell Sci.* 125: 1152-1164.
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MONOS
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Try **UBF (F-9): sc-13125**, our highly recommended monoclonal alternative to UBF (H-300). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **UBF (F-9): sc-13125**.