

UBTFL1/3/5/6 (K-20): sc-324466

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. The UBTFL (upstream-binding factor 1-like protein 1) protein family is related to UBF. UBTFL1, UBTFL3 (also known as UBTFL5) and UBTFL6 each contain two HMG box DNA-binding domains and are located in the nucleus, therefore suggesting that they may be involved in the regulation of DNA-dependent processes such as DNA repair, replication and transcription. All of these processes require changing the confirmation of chromatin.

REFERENCES

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3. Jones, K.A., et al. 1995. Localization of the human RNA polymerase I transcription factor gene (UBTF) to the D17S183 locus on chromosome 17q21 and construction of a long-range restriction map of the region. *Genomics* 30: 602-604.
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6. Weiss, M.A. 2001. Floppy SOX: mutual induced fit in hmg (high-mobility group) box-DNA recognition. *Mol. Endocrinol.* 15: 353-362.
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CHROMOSOMAL LOCATION

Genetic locus: UBTFL1 (human) mapping to 11q14.3, UBTFL3/UBTFL5 (human) mapping to 2q11.1, UBTFL6 (human) mapping to 2q11.2.

SOURCE

UBTFL1/3/5/6 (K-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of UBTFL1 of human origin.

STORAGE

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

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-324466 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-324466 X, 200 µg/0.1 ml.

APPLICATIONS

UBTFL1/3/5/6 (K-20) is recommended for detection of UBTFL1, UBTFL3, UBTFL5 and UBTFL6 of 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).

UBTFL1/3/5/6 (K-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

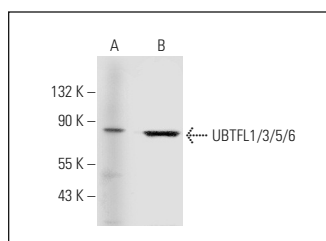
Molecular Weight of UBTFL1/3/5/6: 46/46/46/47 kDa.

Positive Controls: human liver extract: sc-363766 or U-251-MG whole cell lysate: sc-364176.

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



UBTFL1/3/5/6 (K-20): sc-324466. Western blot analysis of UBTFL1/3/5/6 expression in human liver tissue extract (A) and U-251-MG whole cell lysate (B).

RESEARCH USE

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