SANTA CRUZ BIOTECHNOLOGY, INC.

# JKTBP (K-13): sc-103578

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*The Power to Question*

## BACKGROUND

Heterogeneous nuclear ribonucleoproteins (hnRNPs) constitute a set of polypeptides that contribute to mRNA transcription and pre-mRNA processing, as well as mature mRNA transport to the cytoplasm and translation. There are approximately 20 known hnRNP proteins, and their complexes are the major constituents of the spliceosome. The majority of hnRNP protein components are localized to the nucleus, however some shuttle between the nucleus and the cytoplasm. JKTBP (JKT41-binding protein), also known as HNRPDL (heterogeneous nuclear ribonucleoprotein D-like), is a 420 amino acid hnRNP that shuttles between the nucleus and the cytoplasm and contains two RRM (RNA recognition motif) domains. Expressed in a variety of tissues, including liver, brain, lung, placenta, kidney, spleen, testis, thymus, ovary and skeletal muscle, JKTBP functions as a transcriptional regulator that binds to both single- and double-stranded DNA and is capable of both enhancing and repressing transcriptional activity. Multiple isoforms of JKTBP exist due to alternative splicing events.

## REFERENCES


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3. Kamei, D., et al. 1999. Two forms of expression and genomic structure of the human heterogeneous nuclear ribonucleoprotein D-like JKTBP gene (HNRPDL). Gene 228: 13-22.
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## CHROMOSOMAL LOCATION

Genetic locus: HNRPDL (human) mapping to 4q21.22; Hnrpdl (mouse) mapping to 5 E4.

## RESEARCH USE

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

## SOURCE

JKTBP (K-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of JKTBP 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-103578 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-103578 X, 200 µg/0.1 ml.

## APPLICATIONS

JKTBP (K-13) is recommended for detection of JKTBP of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 JKTBP siRNA (h): sc-105584, JKTBP siRNA (m): sc-105585, JKTBP shRNA Plasmid (h): sc-105584-SH, JKTBP shRNA Plasmid (m): sc-105585-SH, JKTBP shRNA (h) Lentiviral Particles: sc-105584-V and JKTBP shRNA (m) Lentiviral Particles: sc-105585-V.

JKTBP (K-13) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of JKTBP isoforms: 53/38 kDa.

Positive Controls: Daudi cell lysate: sc-2415.

## 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) 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.

## STORAGE

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

## PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.