

# CNOT7 (E-16): sc-82835

## BACKGROUND

CNOT7 (CCR4-NOT transcription complex, subunit 7), also known as CAF1 (CCR4-associated factor 1), hCAF-1 or BTG1-binding factor 1, is a member of the CAF1 family. Localizing to the nucleus, CNOT7 is ubiquitously expressed and is believed to function as a transcription factor, playing a role in a wide variety of processes. CNOT7 functions as a component of the evolutionarily conserved CCR4-NOT complex, a multi-subunit complex that participates in transcription as well as mRNA degradation. CNOT7 and other subunits of the CCR4-NOT complex play a role in the regulation of nuclear hormone receptor activities. CNOT7 directly binds to and interacts with RXR $\beta$ , TOB1, TOB2, BTG1, BTG2 and BTG3. In addition, CNOT7 knockout mice are sterile and show an increase in bone mass, suggesting an important role for CNOT7 in spermatogenesis and as a suppressor of bone mass and BMP (bone morphogenetic protein) actions in osteoblasts.

## CHROMOSOMAL LOCATION

Genetic locus: CNOT7 (human) mapping to 8p22; Cnot7 (mouse) mapping to 8 A4.

## SOURCE

CNOT7 (E-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CNOT7 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g 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-82835 X, 200  $\mu$ g/0.1 ml.

Blocking peptide available for competition studies, sc-82835 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

CNOT7 (E-16) is recommended for detection of CNOT7 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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); non cross-reactive with other CNOT family members.

CNOT7 (E-16) is also recommended for detection of CNOT7 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for CNOT7 siRNA (h): sc-72946, CNOT7 siRNA (m): sc-72947, CNOT7 shRNA Plasmid (h): sc-72946-SH, CNOT7 shRNA Plasmid (m): sc-72947-SH, CNOT7 shRNA (h) Lentiviral Particles: sc-72946-V and CNOT7 shRNA (m) Lentiviral Particles: sc-72947-V.

CNOT7 (E-16) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

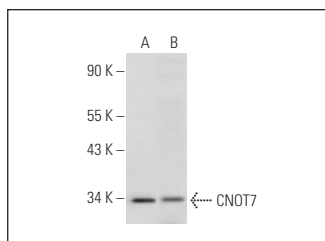
Molecular Weight of CNOT7: 33 kDa.

Positive Controls: mouse testis extract: sc-2405, KNRK whole cell lysate: sc-2214 or HeLa whole cell lysate: sc-2200.

## 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



CNOT7 (E-16): sc-82835. Western blot analysis of CNOT7 expression in KNRK whole cell lysate (A) and mouse testis tissue extract (B).

## SELECT PRODUCT CITATIONS

1. Gou, L.T., et al. 2014. Pachytene piRNAs instruct massive mRNA elimination during late spermiogenesis. *Cell Res.* 24: 680-700.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.


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Try **CNOT7 (18W): sc-101009**, our highly recommended monoclonal alternative to CNOT7 (E-16).