

CNOT2 (L-20): sc-82818



The Power to Question

BACKGROUND

CNOT2 (CCR4-NOT transcription complex subunit 2) is a ubiquitous protein encoded by the human gene CNOT2. CNOT2 belongs to the CNOT2/3/5 family and is part of the CCR4-NOT complex. The CCR4-NOT complex is an evolutionarily conserved, multi-component complex known to be involved in transcription as well as mRNA degradation. Various subunits (e.g. CNOT1, CNOT2) are involved in influencing nuclear hormone receptor activities. The CCR4-NOT complex is also involved in the regulation of Histone H3 Lysine 4 methylation through a ubiquitin-dependent pathway that likely involves the proteasome. Increased expression of the CNOT2 subunit acts to strongly repress transcription by RNA polymerase II. This repressive effect is mediated by a conserved NOT-Box, which is located at the C-terminus of CNOT2 proteins. Repression by the NOT-Box is sensitive to treatment with the histone deacetylase (HDAC) inhibitor trichostatin A.

REFERENCES

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- Jayne, S., et al. 2006. Involvement of the SMRT/NCoR-HDAC3 complex in transcriptional repression by the CNOT2 subunit of the human Ccr4-NOT complex. *Biochem. J.* 398: 461-467.
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CHROMOSOMAL LOCATION

Genetic locus: CNOT2 (human) mapping to 12q15 ; Cnot2 (mouse) mapping to 10 D2.

SOURCE

CNOT2 (L-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CNOT2 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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-82818 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-82818 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CNOT2 (L-20) is recommended for detection of CNOT2 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); non cross-reactive with other CNOT family members.

CNOT2 (L-20) is also recommended for detection of CNOT2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for CNOT2 siRNA (h): sc-72937, CNOT2 siRNA (m): sc-72938, CNOT2 shRNA Plasmid (h): sc-72937-SH, CNOT2 shRNA Plasmid (m): sc-72938-SH, CNOT2 shRNA (h) Lentiviral Particles: sc-72937-V and CNOT2 shRNA (m) Lentiviral Particles: sc-72938-V.

CNOT2 (L-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of CNOT2 isoforms 1/2/3/4/5: 60/41/22/52/54 kDa.

Positive Controls: 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) 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.

RESEARCH USE

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

MONOS
Satisfaction
Guaranteed

Try **CNOT2 (2191C2a): sc-81229**, our highly recommended monoclonal alternative to CNOT2 (L-20).