SANTA CRUZ BIOTECHNOLOGY, INC.

CNOT1 (Y-15): sc-242483



BACKGROUND

The CCR4-NOT complex is an evolutionarily conserved, multi-component complex known to be involved in transcription as well as mRNA degradation. Various subunits within the complex 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. CNOT1 (CCR4-NOT transcription complex, subunit 1), also known as NOT1, CDC39, AD-005 or NOT1H (negative regulator of transcription subunit 1 homolog), is a 2,376 amino acid protein exists as a subunit of the CCR4-NOT complex and belongs to the CNOT1 family. Highly expressed in lung, brain, placenta, heart, liver, thymus, kidney and spleen, with low expression in colon and skeletal muscle, CNOT1 undergoes alternative splicing to produce four isoforms. The gene encoding CNOT1 maps to human chromosome 16q21 and mouse chromosome 8 D1.

REFERENCES

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- Winkler, G.S., Mulder, K.W., Bardwell, V.J., Kalkhoven, E. and Timmers, H.T. 2006. Human Ccr4-Not complex is a ligand-dependent repressor of nuclear receptor-mediated transcription. EMBO J. 25: 3089-3099.
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- Lau, N.C., Kolkman, A., van Schaik, F.M., Mulder, K.W., Pijnappel, W.W., Heck, A.J. and Timmers, H.T. 2009. Human Ccr4-Not complexes contain variable deadenylase subunits. Biochem. J. 422: 443-453.

CHROMOSOMAL LOCATION

Genetic locus: CNOT1 (human) mapping to 16q21; Cnot1 (mouse) mapping to 8 D1.

SOURCE

CNOT1 (Y-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CNOT1 of human origin.

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-242483 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CNOT1 (Y-15) is recommended for detection of CNOT1 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.

CNOT1 (Y-15) is also recommended for detection of CNOT1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for CNOT1 siRNA (h): sc-93370, CNOT1 siRNA (m): sc-142436, CNOT1 shRNA Plasmid (h): sc-93370-SH, CNOT1 shRNA Plasmid (m): sc-142436-SH, CNOT1 shRNA (h) Lentiviral Particles: sc-93370-V and CNOT1 shRNA (m) Lentiviral Particles: sc-142436-V.

Molecular Weight of CNOT1 isoforms: 266/266/241/174 kDa.

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) Immunofluo-rescence: 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.

RESEARCH USE

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

PROTOCOLS

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