

CNBP (C-15): sc-51052

BACKGROUND

Cellular nucleic acid binding protein (CNBP) is a highly conserved RNA-binding protein that plays a fundamental biological role in eukaryotic cells by increasing heterologous protein production. CNBP localizes to the nucleus of cells and functions in the brain, specifically in the anterior visceral endoderm and, subsequently, in the anterior definitive endoderm, anterior neuroectoderm, anterior mesendoderm, headfolds and forebrain. CNBP is necessary for the forebrain induction and specification, and mutations in the CNBP gene lead to severe forebrain truncation as well as various craniofacial defects due to a lack of proper morphogenetic movements of the anterior visceral endoderm during the pre-gastrulation stage. Overexpression of CNBP activates cell proliferation and stimulates the activity of the c-Myc promoter.

REFERENCES

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- De Dominicis, A., et al. 2000. cDNA cloning and developmental expression of cellular nucleic acid-binding protein (CNBP) gene in *Xenopus laevis*. *Gene* 241: 35-43.
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- Schlatter, S., et al. 2002. Novel CNBP- and La-based translation control systems for mammalian cells. *Biotechnol. Bioeng.* 81: 1-12.
- Chen, W., et al. 2003. The zinc-finger protein CNBP is required for forebrain formation in the mouse. *Development* 130: 1367-1379.

CHROMOSOMAL LOCATION

Genetic locus: CNBP (human) mapping to 3q21.3; Cnbp1 (mouse) mapping to 6 D1-D2.

SOURCE

CNBP (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of CNBP of human origin.

PRODUCT

Each vial contains 200 μ 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-51052 X, 200 μ g/0.1 ml.

Blocking peptide available for competition studies, sc-51052 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CNBP (C-15) is recommended for detection of all isoforms of CNBP 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).

CNBP (C-15) is also recommended for detection of all isoforms of CNBP in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for CNBP siRNA (h): sc-60419, CNBP siRNA (m): sc-60420, CNBP shRNA Plasmid (h): sc-60419-SH, CNBP shRNA Plasmid (m): sc-60420-SH, CNBP shRNA (h) Lentiviral Particles: sc-60419-V and CNBP shRNA (m) Lentiviral Particles: sc-60420-V.

CNBP (C-15) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

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.

SELECT PRODUCT CITATIONS

- Qiu, J., et al. 2014. Cellular nucleic acid binding protein suppresses tumor cell metastasis and induces tumor cell death by downregulating heterogeneous ribonucleoprotein K in fibrosarcoma cells. *Biochim. Biophys. Acta* 1840: 2244-2252.

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 or our catalog for detailed protocols and support products.


 MONOS
 Satisfaction
 Guaranteed

Try **CNBP (H-7): sc-515387**, our highly recommended monoclonal alternative to CNBP (C-15).