SANTA CRUZ BIOTECHNOLOGY, INC.

LBP-1C (P-14): sc-168411

BACKGROUND

LBP-1C, also known as TFCP2 (transcription factor CP2), CP2, LSF, SEF or TFCP2C, is a 502 amino acid nuclear protein that belongs to the grh/CP2 family. Expressed ubiquitously with highest expression in spleen, brain, ovary, kidney, liver, thymus, heart and lung, LBP-1C binds to the promotors of several genes, such as those encoding Fibrinogen, Hemoglobin α and the viral HIV-1 protein and, via this interaction, plays a role in transcription. Specifically, LBP-1C functions as part of the stage selector protein (SSP) complex where it binds DNA as a dimer and facilitates the interaction of enhancer elements with target promoters, thereby activating transcription. Defects in the gene encoding LBP-1C may be associated with Alzheimer's Disease, depression and Purkinje cell degeneration. LBP-1C is expressed as two isoforms due to alternative splicing events.

REFERENCES

1. Swendeman, S.L., et al. 1994. Characterization of the genomic structure, chromosomal location, promoter, and development expression of the α-globin transcription factor CP2. J. Biol. Chem. 269: 11663-11671.
2. Cunningham, J.M., et al. 1995. The human transcription factor CP2 (TFCP2), a component of the human γ-globin stage selector protein, maps to chromosome region 12q13 and is within 250 kb of the NF-E2 gene. Genomics 30: 398-399.
3. Lambert, J.C., et al. 2000. The transcriptional factor LBP-1c/CP2/LSF gene on chromosome 12 is a genetic determinant of Alzheimer's disease. Hum. Mol. Genet. 9: 2275-2280.
4. Taylor, A.E., et al. 2001. Genetic association of an LBP-1c/CP2/LSF gene polymorphism with late onset Alzheimer's disease. J. Med. Genet. 38: 232-233.
5. Bertram, L., et al. 2005. Further evidence for LBP-1c/CP2/LSF association in Alzheimer's disease families. J. Med. Genet. 42: 857-862.
6. Lim, J., et al. 2006. A protein-protein interaction network for human inherited ataxias and disorders of Purkinje cell degeneration. Cell 125: 801-814.

CHROMOSOMAL LOCATION

Genetic locus: TFCP2 (human) mapping to 12q13.12; Tfcp2 (mouse) mapping to 15 F1.

SOURCE

LBP-1C (P-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within the DNA binding domain of LBP-1C 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-168411 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-168411 X, 200 µg/0.1 ml.

APPLICATIONS

LBP-1C (P-14) is recommended for detection of LBP-1C 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 LBP-9.

LBP-1C (P-14) is also recommended for detection of LBP-1C in additional species, including bovine.

Suitable for use as control antibody for LBP-1C siRNA (h): sc-96237, LBP-1C siRNA (m): sc-146663, LBP-1C shRNA Plasmid (h): sc-96237-SH, LBP-1C shRNA Plasmid (m): sc-146663-SH, LBP-1C shRNA (h) Lentiviral Particles: sc-96237-V and LBP-1C shRNA (m) Lentiviral Particles: sc-146663-V.

LBP-1C (P-14) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

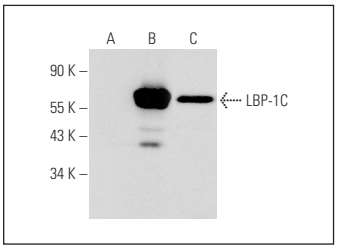
Molecular Weight of LBP-1C: 64 kDa.

Positive Controls: LBP-1C (m): 293T Lysate: sc-121313 or human liver extract: sc-363766.

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.

DATA



LBP-1C (P-14): sc-168411. Western blot analysis of LBP-1C expression in non-transfected: sc-117752 (**A**) and mouse LBP-1C transfected: sc-121313 (**B**) 293T whole cell lysates and human liver tissue extract (**C**).

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.