

LBXCOR1 (I-15): sc-163005

BACKGROUND

LBXCOR1 (ladybird homeobox corepressor 1), also known as SKOR1 (SKI family transcriptional corepressor 1), CORL1 or fessel-15 (functional Smad-suppressing element on chromosome 15), is a 965 amino acid protein belonging to the SKI family. Localizing to nucleus, LBXCOR1 is highly expressed in the central nervous system (CNS) as well as developing spinal cord and adult brain and testis. LBXCOR1 contains a CH1 domain which is required for transcriptional repression and also acts as a transcriptional co-repressor of LBX1. LBXCOR1 additionally interacts with SMAD1, SMAD2 and SMAD3, and inhibits BMP signaling. Existing as three alternatively spliced isoforms, the gene encoding LBXCOR1 maps to human chromosome 15q23. Encoding more than 700 genes, chromosome 15 is made up of approximately 106 million base pairs and consists of about 3% of the human genome. Angelman and Prader-Willi syndromes, as well as Tay-Sachs disease and Marfan syndrome, are all associated with mutations to chromosome 15.

REFERENCES

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2. Mizuhara, E., et al. 2005. CORL1, a novel neuronal lineage-specific transcriptional corepressor for the homeodomain transcription factor LBX1. *J. Biol. Chem.* 280: 3645-3655.
3. Zody, M.C., et al. 2006. Analysis of the DNA sequence and duplication history of human chromosome 15. *Nature* 440: 671-675.
4. Lalonde, M. and Calciano, M.A. 2007. Molecular epigenetics of Angelman syndrome. *Cell. Mol. Life Sci.* 64: 947-960.
5. Makoff, A.J. and Flomen, R.H. 2007. Detailed analysis of 15q11-q14 sequence corrects errors and gaps in the public access sequence to fully reveal large segmental duplications at breakpoints for Prader-Willi, Angelman, and INV DUP(15) syndromes. *Genome Biol.* 8: R114.
6. Arndt, S., et al. 2007. Fessel-15, a novel SKI/SNO homolog protein, antagonizes BMP signaling. *Mol. Cell. Neurosci.* 34: 603-611.
7. Glassmann, A., et al. 2009. Basic molecular fingerprinting of immature cerebellar cortical inhibitory interneurons and their precursors. *Neuroscience* 159: 69-82.

CHROMOSOMAL LOCATION

Genetic locus: SKOR1 (human) mapping to 15q23; Skor1 (mouse) mapping to 9 C.

SOURCE

LBXCOR1 (I-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of LBXCOR1 of human origin.

STORAGE

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

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-163005 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-163005 X, 200 µg/0.1 ml.

APPLICATIONS

LBXCOR1 (I-15) is recommended for detection of LBXCOR1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

LBXCOR1 (I-15) is also recommended for detection of LBXCOR1 in additional species, including canine and porcine.

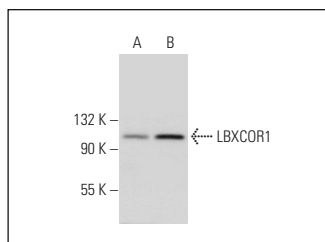
Suitable for use as control antibody for LBXCOR1 siRNA (h): sc-90148, LBXCOR1 siRNA (m): sc-146666, LBXCOR1 shRNA Plasmid (h): sc-90148-SH, LBXCOR1 shRNA Plasmid (m): sc-146666-SH, LBXCOR1 shRNA (h) Lentiviral Particles: sc-90148-V and LBXCOR1 shRNA (m) Lentiviral Particles: sc-146666-V.

LBXCOR1 (I-15) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of LBXCOR1 isoforms 1/2/3: 100/94/96 kDa.

Positive Controls: HeLa nuclear extract: sc-2120 or Jurkat nuclear extract: sc-2132.

DATA



LBXCOR1 (I-15): sc-163005. Western blot analysis of LBXCOR1 expression in HeLa (A) and Jurkat (B) nuclear extracts.

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.