SANTA CRUZ BIOTECHNOLOGY, INC.

CIR (L-22): sc-130722

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Recombination signal binding protein Jκ (RBP-Jκ), also designated KBF2 or CBF1, is the mammalian homolog of the *Drosophila* Suppressor of Hairless [Su(H)], a protein involved in the development of the peripheral nervous system. RBP-Jκ is ubiquitously expressed in mammalian tissues and is involved in the regulation of gene expression. RBP-Jκ has been shown to directly interact with the intracellular domain of the cell surface receptor Notch1. Proteolytically cleaved Notch1 translocates to the nucleus, where it binds to DNA-bound RBP-Jκ and activates transcription of target genes. CIR (for CBF1 interacting corepressor) serves as a linker between RBP-Jκ and the histone deacetylase complex by binding to SAP30 and to histone deacetylase. CIR binding to RBP-Jκ results in transcriptional repression of Notch 1 target genes.

REFERENCES

1. Amakawa, R., et al. 1993. Human Jκ recombination signal binding protein gene (IGKJRB): comparison with its mouse homologue. Genomics 17: 306-315.
2. Oka, C., et al. 1995. Disruption of the mouse RBP-Jκ gene results in early embryonic death. Development 121: 3291-3301.
3. Waltzer, L., et al. 1995. RBP-Jκ repression activity is mediated by a co-repressor and antagonized by the Epstein Barr virus transcription factor EBNA2. Nucleic Acids Res. 23: 4939-4945.
4. Tamura, K., et al. 1995. Physical interaction between a novel domain of the receptor Notch and the transcription factor RBP-Jκ/Su(H). Curr. Biol. 5: 1416-1423.
5. Hsieh, J.J., et al. 1996. Truncated mammalian Notch1 activates CBF1/RBP Jκ-repressed genes by a mechanism resembling that of Epstein-Barr virus EBNA2. Mol. Cell Biol. 16: 952-959.
6. Hsieh, J.J., et al. 1999. CIR, a corepressor linking DNA binding factor CBF1 to the histone deacetylase complex. Proc. Natl. Acad. Sci. USA 96: 23-28.

CHROMOSOMAL LOCATION

Genetic locus: CIR (human) mapping to 2q31.1.

SOURCE

CIR (L-22) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of CIR of human origin.

PRODUCT

Each vial contains 100 µg of IgG in PBS with < 0.1% sodium azide and 0.1% gelatin.

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.

APPLICATIONS

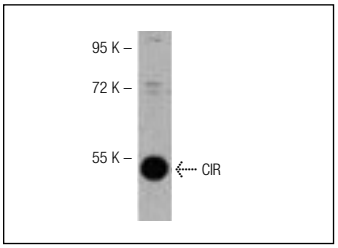
CIR (L-22) is recommended for detection of CIR of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for CIR siRNA (h): sc-38213, CIR shRNA Plasmid (h): sc-38213-SH and CIR shRNA (h) Lentiviral Particles: sc-38213-V.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



CIR (L-22): sc-130722. Western blot analysis of CIR expression in K-562 whole cell lysate.

PROTOCOLS

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

MONOS Satisfaction Guaranteed

Try **CIR (H-1): sc-514120**, our highly recommended monoclonal alternative to CIR (L-22).