

CRN (K-16): sc-69160

BACKGROUND

CRN (crooked neck-like protein 1) is a widely-expressed protein encoded by the human gene CRNKL1. CRN belongs to the crooked-neck family, contains seventeen HAT repeats and is involved in the pre-mRNA splicing process. CRN is essential for embryogenesis and has also been implicated in cell cycle progression. CRN co-localizes with protein splicing factors into distinct subnuclear domains associated with snRNP biogenesis. CRN binds to splicing complexes simultaneously with the addition of the U4/U6.U5 tri-snRNP particle (non-coding RNA component of the major U2-dependent spliceosome).

REFERENCES

- Lai, C.H., Chiu, J.Y. and Lin, W. 2001. Identification of the human crooked neck gene by comparative gene identification. *Biochim. Biophys. Acta* 1517: 449-454.
- Raisin-Tani, S. and Léopold, P. 2002. *Drosophila* crooked-neck protein co-fractionates in a multiprotein complex with splicing factors. *Biochem. Biophys. Res. Commun.* 296: 288-292.
- Chung, S., Zhou, Z., Huddlestone, K.A., Harrison, D.A., Reed, R., Coleman, T.A. and Raymond, B.C. 2002. Crooked neck is a component of the human spliceosome and implicated in the splicing process. *Biochim. Biophys. Acta* 1576: 287-297.
- Deloukas, P., Matthews, L.H., Ashurst, J., Burton, J., Gilbert, J.G., Jones, M., Stavrides, G., Almeida, J.P., Babbage, A.K., Bagguley, C.L., Bailey, J., Tracey, A., Tromans, A.C., Vaudin, M., Wall, M., Wallis, J.M., et al. 2002. The DNA sequence and comparative analysis of human chromosome 20. *Nature* 414: 865-871.
- Jurica, M.S., Licklider, L.J., Gygi, S.R., Grigorieff, N. and Moore, M.J. 2002. Purification and characterization of native spliceosomes suitable for three-dimensional structural analysis. *RNA* 8: 426-439.
- Hillman, R.T., Green, R.E. and Brenner, S.E. 2004. An unappreciated role for RNA surveillance. *Genome Biol.* 5: R8.

CHROMOSOMAL LOCATION

Genetic locus: CRNKL1 (human) mapping to 20p11.23; Crnk1 (mouse) mapping to 2 G1.

SOURCE

CRN (K-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CRN 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-69160 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

CRN (K-16) is recommended for detection of CRN 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).

CRN (K-16) is also recommended for detection of CRN in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for CRN siRNA (h): sc-77028, CRN siRNA (m): sc-77029, CRN shRNA Plasmid (h): sc-77028-SH, CRN shRNA Plasmid (m): sc-77029-SH, CRN shRNA (h) Lentiviral Particles: sc-77028-V and CRN shRNA (m) Lentiviral Particles: sc-77029-V.

Molecular Weight of CRN: 83 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 Blotting 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.

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.



Try **CRN (2212C1a): sc-81235**, our highly recommended monoclonal alternative to CRN (K-16).