# SANTA CRUZ BIOTECHNOLOGY, INC.

# HkRP3 (E-16): sc-168093



The Power to Question

# BACKGROUND

HkRP3 (hook-related protein 3), also known as CCDC88B (coiled-coil domaincontaining protein 88B) or BRLZ (brain leucine zipper domain-containing protein), is a 1,476 amino acid protein that belongs to the CCDC88 family. Members of the hook-related protein family are characterized by the presence of a C-terminal hook-related domain and an N-terminal potential microtubule binding domain. HkRP3 may be involved in the linkage of various organelles to microtubules, and exists as six alternatively spliced isoforms. The gene encoding HkRP3 maps to human chromosome 11q13.1 and mouse chromosome 19 A. Chromosome 11 houses over 1,400 genes and comprises nearly 4% of the human genome. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are associated with defects in genes that maps to chromosome 11.

#### REFERENCES

- Fabiani, J.E., et al. 2000. Hereditary angioedema. Long-term follow-up of 88 patients. Experience of the Argentine Allergy and Immunology Institute. Allergol. Immunopathol. 28: 267-271.
- Jira, P.E., et al. 2003. Smith-Lemli-Opitz syndrome and the DHCR7 gene. Ann. Hum. Genet. 67: 269-280.
- Simpson, F., et al. 2005. A novel hook-related protein family and the characterization of hook-related protein 1. Traffic 6: 442-458.
- Enomoto, A., et al. 2006. Girdin, a novel actin-binding protein, and its family of proteins possess versatile functions in the Akt and Wnt signaling pathways. Ann. N.Y. Acad. Sci. 1086: 169-184.
- Schuchman, E.H. 2007. The pathogenesis and treatment of acid sphingomyelinase-deficient Niemann-Pick disease. J. Inherit. Metab. Dis. 30: 654-663.
- Siem, G., et al. 2008. Jervell and Lange-Nielsen syndrome in Norwegian children: aspects around cochlear implantation, hearing, and balance. Ear Hear. 29: 261-269.
- Bhuiyan, Z.A., et al. 2008. An intronic mutation leading to incomplete skipping of exon-2 in KCNQ1 rescues hearing in Jervell and Lange-Nielsen syndrome. Prog. Biophys. Mol. Biol. 98: 319-327.
- Coldren, C.D., et al. 2009. Chromosomal microarray mapping suggests a role for BSX and Neurogranin in neurocognitive and behavioral defects in the 11q terminal deletion disorder (Jacobsen syndrome). Neurogenetics 10: 89-95.
- 9. Matsushita, E., et al. 2011. Protective role of Gipie, a Girdin family protein, in endoplasmic reticulum stress responses in endothelial cells. Mol. Biol. Cell. 22: 736-747.

# CHROMOSOMAL LOCATION

Genetic locus: CCDC88B (human) mapping to 11q13.1; Ccdc88b (mouse) mapping to 19 A.

# **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

#### SOURCE

HkRP3 (E-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of HkRP3 of human origin.

#### PRODUCT

Each vial contains 200  $\mu g$  IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-168093 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **APPLICATIONS**

HkRP3 (E-16) is recommended for detection of HkRP3 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).

HkRP3 (E-16) is also recommended for detection of HkRP3 in additional species, including bovine and porcine.

Suitable for use as control antibody for HkRP3 siRNA (h): sc-96287, HkRP3 siRNA (m): sc-146043, HkRP3 shRNA Plasmid (h): sc-96287-SH, HkRP3 shRNA Plasmid (m): sc-146043-SH, HkRP3 shRNA (h) Lentiviral Particles: sc-96287-V and HkRP3 shRNA (m) Lentiviral Particles: sc-146043-V.

Molecular Weight of HkRP3 isoforms 1/2/4: 165/114/151 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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluo-rescence: 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<sup>™</sup> Mounting Medium: sc-24941.

# **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

# PROTOCOLS

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