SANTA CRUZ BIOTECHNOLOGY, INC.

HCFC1R1 (C-12): sc-164570

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

HCFC1R1 (host cell factor C1 regulator 1), also known as HCF-1 β-propeller-interacting protein or HPIP, is a 138 amino acid protein which modulates the subcellular localization of HCF1, thus modifying its activity. When HCFC1R1 is overexpressed, HCF1, whose interaction with VP16 is required to activate the herpes simplex virus (HSV) immediate-early genes, accumulates in the cytoplasm. HCFC1R1 localizes to the cytoplasm as well as the nucleus, and is widely expressed. The gene encoding HCFC1R1 maps to human chromosome 16, which encodes over 900 genes and comprises nearly 3% of the human genome. The GAN gene is located on chromosome 16 and, with mutation, may lead to giant axonal neuropathy, a nervous system disorder characterized by increasing malfunction with growth. The rare disorder Rubinstein-Taybi syndrome is also associated with chromosome 16, as is Crohn's disease, which is a gastrointestinal inflammatory condition.

REFERENCES

1. Baraitser, M., et al. 1983. The Rubinstein-Taybi syndrome: occurrence in two sets of identical twins. Clin. Genet. 23: 318-320.
2. Breuning, M.H., et al. 1993. Rubinstein-Taybi syndrome caused by submicroscopic deletions within 16p13.3. Am. J. Hum. Genet. 52: 249-254.
3. Bomont, P., et al. 2000. The gene encoding gigaxonin, a new member of the cytoskeletal BTB/kelch repeat family, is mutated in giant axonal neuropathy. Nat. Genet. 26: 370-374.
4. Mahajan, S.S., et al. 2002. Interaction of HCF-1 with a cellular nuclear export factor. J. Biol. Chem. 277: 44292-44299.
5. Kuhlenbäumer, G., et al. 2002. Giant axonal neuropathy (GAN): case report and two novel mutations in the gigaxonin gene. Neurology 58: 1273-1276.
6. Cho, J.H. 2004. Advances in the genetics of inflammatory bowel disease. Curr. Gastroenterol. Rep. 6: 467-473.
7. Mathew, C.G., et al. 2004. Genetics of inflammatory bowel disease: progress and prospects. Hum. Mol. Genet. 13: R161-R168.

CHROMOSOMAL LOCATION

Genetic locus: HCFC1R1 (human) mapping to 16p13.3; Hcfc1r1 (mouse) mapping to 17 A3.3.

SOURCE

HCFC1R1 (C-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of HCFC1R1 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-164570 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

HCFC1R1 (C-12) is recommended for detection of HCFC1R1 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).

Suitable for use as control antibody for HCFC1R1 siRNA (h): sc-93241, HCFC1R1 siRNA (m): sc-145905, HCFC1R1 shRNA Plasmid (h): sc-93241-SH, HCFC1R1 shRNA Plasmid (m): sc-145905-SH, HCFC1R1 shRNA (h) Lentiviral Particles: sc-93241-V and HCFC1R1 shRNA (m) Lentiviral Particles: sc-145905-V.

Molecular Weight of HCFC1R1 isoform 1: 15 kDa.

Molecular Weight of HCFC1R1 isoform 2: 13 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 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.

STORAGE

Store at 4° C, **DO 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.