SANTA CRUZ BIOTECHNOLOGY, INC.

FCHSD1 (T-12): sc-137475



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BACKGROUND

FCHSD1 (FCH and double SH3 domains protein 1) is a 690 amino acid protein that contains one FCH domain and 2 SH3 domains. FCHSD1 exists as three isoforms as a result of alternative splicing events. The gene encoding FCHSD1 maps to chromosome 5, which is associated with Cockayne syndrome through the ERCC8 gene and familial adenomatous polyposis through the adenomatous polyposis coli (APC) tumor suppressor gene. Treacher Collins syndrome is also chromosome 5 associated and is caused by insertions or deletions within the TCOF1 gene. Deletion of the p arm of chromosome 5 leads to Cri du chat syndrome. Deletion of 5q or chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

REFERENCES

- Katoh, M., et al. 2004. Identification and characterization of human FCHSD1 and FCHSD2 genes in silico. Int. J. Mol. Med. 13: 749-754.
- Rauch, A., et al. 2007. Chromosome 5q subtelomeric deletion syndrome. Am. J. Med. Genet. C Semin. Med. Genet. 145C: 372-376.
- Villa, N., et al. 2007. Fetal trisomy 5 mosaicism: case report and literature review. Am. J. Med. Genet. A 143A: 2343-2346.
- Shadduck, R.K., et al. 2007. Recent advances in myelodysplastic syndromes. Exp. Hematol. 35: 137-143.
- Falini, B., et al. 2007. Translocations and mutations involving the nucleophosmin (NPM1) gene in lymphomas and leukemias. Haematologica 92: 519-532.
- Kristoffersen, K.E. 2008. Speech and language development in cri du chat syndrome: a critical review. Clin. Linguist. Phon. 22: 443-457.
- Valent, P. 2008. Revealing the pathogenesis of the 5q- syndrome. Eur. J. Clin. Invest. 38: 539-540.
- Buysse, K., et al. 2008. Mapping of 5q35 chromosomal rearrangements within a genomically unstable region. J. Med. Genet. 45: 672-678.
- 9. Azman, B.Z., et al. 2008. Two cases of deletion 5p syndrome: one with paternal involvement and another with atypical presentation. Singapore Med. J. 49: e98-e100.

CHROMOSOMAL LOCATION

Genetic locus: FCHSD1 (human) mapping to 5q31.3; Fchsd1 (mouse) mapping to 18 B3.

SOURCE

FCHSD1 (T-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of FCHSD1 of human origin.

PRODUCT

Each vial contains 100 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-137475 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FCHSD1 (T-12) is recommended for detection of FCHSD1 isoforms 1-3 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with FCHSD2.

FCHSD1 (T-12) is also recommended for detection of FCHSD1 isoforms 1-3 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for FCHSD1 siRNA (h): sc-91775, FCHSD1 siRNA (m): sc-145150, FCHSD1 shRNA Plasmid (h): sc-91775-SH, FCHSD1 shRNA Plasmid (m): sc-145150-SH, FCHSD1 shRNA (h) Lentiviral Particles: sc-91775-V and FCHSD1 shRNA (m) Lentiviral Particles: sc-145150-V.

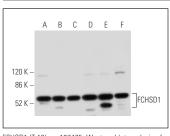
Molecular Weight of FCHSD1 isoforms 1/2/3: 77/46/41 kDa.

Positive Controls: HEK293 whole cell lysate: sc-45136, HeLa whole cell lysate: sc-2200 or Jurkat whole cell lysate: sc-2204.

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). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

DATA



FCHSD1 (T-12): sc-137475. Western blot analysis of FCHSD1 expression in NIH/3T3 (**A**), HeLa (**B**), Jurkat (**C**) K-562 (**D**), MCF7 (**E**) and HEK293 (**F**) whole cell lysates.

STORAGE

Store at 4° C, **D0 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.