SANTA CRUZ BIOTECHNOLOGY, INC.

OFCC1 (Q-18): sc-243656

BACKGROUND

OFCC1 (orafacial cleft 1 candidate gene 1 protein), also known as MRDS1 or orofacial clefting chromosomal breakpoint region candidate 1 protein, is a 231 amino acid protein that exists as 5 alternatively spliced isoforms. A chromosomal aberration involving OFCC1 is found in patients with orofacial cleft. The gene encoding OFCC1 maps to human chromosome 6p24.3 and mouse chromosome 13 A3.3. Chromosome 6 contains 170 million base pairs and comprises nearly 6% of the human genome. Deletion of a portion of the q arm of chromosome 6 is associated with early onset intestinal cancer, suggesting the presence of a cancer susceptibility locus. Additionally, porphyria cutanea tarda, Parkinson's disease, Stickler syndrome and a susceptibility to bipolar disorder are all associated with genes that map to chromosome 6.

REFERENCES

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4. Brandenberger, R., et al. 2004. Transcriptome characterization elucidates signaling networks that control human ES cell growth and differentiation. Nat. Biotechnol. 22: 707-716.
5. Davies, S.J., et al. 2004. Mapping of three translocation breakpoints associated with orofacial clefting within 6p24 and identification of new transcripts within the region. Cytogenet. Genome Res. 105: 47-53.
6. Bläker, H., et al. 2008. Recurrent deletions at 6q in early age of onset non-HNPCC- and non-FAP-associated intestinal carcinomas. Evidence for a novel cancer susceptibility locus at 6q14-q22. Genes Chromosomes Cancer 47: 159-164.
7. Jalil, S., et al. 2010. Associations among behavior-related susceptibility factors in porphyria cutanea tarda. Clin. Gastroenterol. Hepatol. 8: 297-302.
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CHROMOSOMAL LOCATION

Genetic locus: OFCC1 (human) mapping to 6p24.3; Ofcc1 (mouse) mapping to 13 A3.3.

SOURCE

OFCC1 (Q-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of OFCC1 of human origin.

STORAGE

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

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-243656 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

OFCC1 (Q-18) is recommended for detection of OFCC1 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).

OFCC1 (Q-18) is also recommended for detection of OFCC1 in additional species, including bovine.

Suitable for use as control antibody for OFCC1 siRNA (h): sc-95240, OFCC1 siRNA (m): sc-150181, OFCC1 shRNA Plasmid (h): sc-95240-SH, OFCC1 shRNA Plasmid (m): sc-150181-SH, OFCC1 shRNA (h) Lentiviral Particles: sc-95240-V and OFCC1 shRNA (m) Lentiviral Particles: sc-150181-V.

Molecular Weight of OFCC1 isoforms 1/2/3: 27/31/21 kDa.

Molecular Weight of OFCC1 isoforms 4/5: 13/16 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.

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.