SANTA CRUZ BIOTECHNOLOGY, INC.

REEP5 (N-12): sc-133406

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The Power to Question

BACKGROUND

REEP5 (receptor expression-enhancing protein 5), also known as C5orf18, DP1, TB2 or D5S346, is a 189 amino acid multi-pass membrane protein. Thought to promote the functional cell surface expression of olfactory receptors, REEP5 belongs to the DP1 family and is encoded by a gene that maps to chromosome 5. With 181 million base pairs encoding around 1,000 genes, chromosome 5 is about 6% of human genomic DNA. Chromosome 5 is associated with Cocka yne syndrome through the ERCC8 gene and familial adenomatous polyposis through the adenomatous polyposis *coli* (APC) tumor suppressor gene. Trea cher 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

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3. Kinzler, K.W., et al. 1991. Identification of FAP locus genes from chromosome 5q21. Science 253: 661-665.
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5. Prieschl, E.E., et al. 1996. The murine homolog of TB2/DP1, a gene of the familial adenomatous polyposis (FAP) locus. Gene 169: 215-218.
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7. Saito, H., et al. 2004. RTP family members induce functional expression of mammalian odorant receptors. Cell 119: 679-691.
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CHROMOSOMAL LOCATION

Genetic locus: REEP5 (human) mapping to 5q22.2; Reep5 (mouse) mapping to 18 B1.

SOURCE

REEP5 (N-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of REEP5 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-133406 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

REEP5 (N-12) is recommended for detection of REEP5 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 other REEP family members.

REEP5 (N-12) is also recommended for detection of REEP5 in additional species, including canine.

Suitable for use as control antibody for REEP5 siRNA (h): sc-91981, REEP5 siRNA (m): sc-152794, REEP5 shRNA Plasmid (h): sc-91981-SH, REEP5 shRNA Plasmid (m): sc-152794-SH, REEP5 shRNA (h) Lentiviral Particles: sc-91981-V and REEP5 shRNA (m) Lentiviral Particles: sc-152794-V.

Molecular Weight (predicted) of REEP5: 21 kDa.

Molecular Weight (observed) of REEP5: 15/17 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Jurkat whole cell lysate: sc-2204 or HISM cell lysate: sc-2229.

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.

STORAGE

Store at 4° C, **DO 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.

PROTOCOLS

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