

# REEP5 (P-13): sc-133407

## 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 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

- Dixon, M.J., et al. 1991. The gene for Treacher Collins syndrome maps to the long arm of chromosome 5. *Am. J. Hum. Genet.* 49: 17-22.
- Joslyn, G., et al. 1991. Identification of deletion mutations and three new genes at the familial polyposis locus. *Cell* 66: 601-613.
- Kinzler, K.W., et al. 1991. Identification of FAP locus genes from chromosome 5q21. *Science* 253: 661-665.
- Nishisho, I., et al. 1991. Mutations of chromosome 5q21 genes in FAP and colorectal cancer patients. *Science* 253: 665-669.
- 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.
- Online Mendelian Inheritance in Man, OMIM<sup>™</sup>. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 125265. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Saito, H., et al. 2004. RTP family members induce functional expression of mammalian odorant receptors. *Cell* 119: 679-691.

## CHROMOSOMAL LOCATION

Genetic locus: REEP5 (human) mapping to 5q22.2.

## SOURCE

REEP5 (P-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-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-133407 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## APPLICATIONS

REEP5 (P-13) is recommended for detection of REEP5 of 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 .

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

Molecular Weight (predicted) of REEP5: 21 kDa.

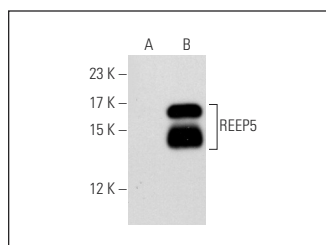
Molecular Weight (observed) of REEP5: 15/17 kDa.

Positive Controls: REEP5 (h): 293T Lysate: sc-117085, HeLa whole cell lysate: sc-2200, or K-562 whole cell lysate: sc-2203.

## 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<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (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) 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<sup>™</sup> Mounting Medium: sc-24941.

## DATA



REEP5 (P-13): sc-133407. Western blot analysis of REEP5 expression in non-transfected: sc-117752 (A) and human REEP5 transfected: sc-117085 (B) 293T whole cell lysates.

## RESEARCH USE

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

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Try **REEP5 (H-10): sc-393508** or **REEP5 (F-12): sc-393522**, our highly recommended monoclonal alternatives to REEP5 (P-13).