

REEP5 (H-10): sc-393508

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[™]. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 125265. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

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

SOURCE

REEP5 (H-10) is a mouse monoclonal antibody raised against amino acids 114-189 mapping at the C-terminus of REEP5 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

REEP5 (H-10) is available conjugated to agarose (sc-393508 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393508 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393508 PE), fluorescein (sc-393508 FITC), Alexa Fluor[®] 488 (sc-393508 AF488), Alexa Fluor[®] 546 (sc-393508 AF546), Alexa Fluor[®] 594 (sc-393508 AF594) or Alexa Fluor[®] 647 (sc-393508 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-393508 AF680) or Alexa Fluor[®] 790 (sc-393508 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

REEP5 (H-10) is recommended for detection of REEP5 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

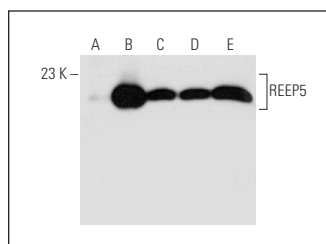
Suitable for use as control antibody for REEP5 siRNA (h): sc-91981, REEP5 siRNA (m): sc-152794, REEP5 shRNA Plasmid (h): sc-91981-SH, REEP5 shRNA Plasmid (m): sc-152794-SH, REEP5 shRNA (h) Lentiviral Particles: sc-91981-V and REEP5 shRNA (m) Lentiviral Particles: sc-152794-V.

Molecular Weight (predicted) of REEP5: 21 kDa.

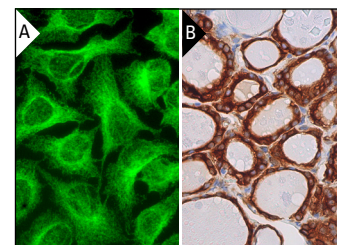
Molecular Weight (observed) of REEP5: 15/17 kDa.

Positive Controls: REEP5 (h): 293T Lysate: sc-117085, HISM cell lysate: sc-2229 or HeLa whole cell lysate: sc-2200.

DATA



REEP5 (H-10): sc-393508. Western blot analysis of REEP5 expression in non-transfected 293T: sc-117752 (A), human REEP5 transfected 293T: sc-117085 (B), HISM (C), HeLa (D) and MCF7 (E) whole cell lysates.



REEP5 (H-10): sc-393508. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic and membrane localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human thyroid gland tissue showing cytoplasmic staining of glandular cells (B).

SELECT PRODUCT CITATIONS

- Kaul, Z., et al. 2020. Loss of tumor susceptibility gene 101 (TSG101) perturbs endoplasmic reticulum structure and function. *Biochim. Biophys. Acta Mol. Cell Res.* 1867: 118741.
- Zhou, C., et al. 2021. TSPAN1 promotes autophagy flux and mediates cooperation between WNT-CTNNB1 signaling and autophagy via the MIR454-FAM83A-TSPAN1 axis in pancreatic cancer. *Autophagy* 17: 3175-3195.

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.

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