

REEP4 (H-12): sc-398191

BACKGROUND

REEP4 (receptor accessory protein 4), which is also known as receptor expression-enhancing protein 4, PP432, FLJ22246, C8orf20 or FLJ22277, is a 257 amino acid multi-pass membrane protein that interacts with odorant receptor proteins. REEP4 may be involved increasing odorant receptors on cell surfaces, although REEP4 itself is not expressed in olfactory neurons. REEP4 is a member of the DP1 family and has two isoforms which form as a result of alternative splicing events. The gene encoding REEP4 maps to human chromosome 8p21.3. Consisting of nearly 146 million base pairs, chromosome 8 encodes over 800 genes and is associated with a variety of diseases and malignancies. Schizophrenia, bipolar disorder, Trisomy 8, Pfeiffer syndrome, congenital hypothyroidism, Waardenburg syndrome and some leukemias and lymphomas are thought to occur as a result of defects in specific genes that maps to chromosome 8.

REFERENCES

1. Wildenauer, D.B. and Schwab, S.G. 1999. Chromosomes 8 and 10 workshop. *Am. J. Med. Genet.* 88: 239-243.
2. Kashino, G., et al. 2001. Preferential expression of an intact WRN gene in Werner syndrome cell lines in which a normal chromosome 8 has been introduced. *Biochem. Biophys. Res. Commun.* 289: 111-115.
3. Selicorni, A., et al. 2002. Cytogenetic mapping of a novel locus for type II Waardenburg syndrome. *Hum. Genet.* 110: 64-67.
4. Saito, H., et al. 2004. RTP family members induce functional expression of mammalian odorant receptors. *Cell* 119: 679-691.

CHROMOSOMAL LOCATION

Genetic locus: REEP4 (human) mapping to 8p21.3; Reep4 (mouse) mapping to 14 D2.

SOURCE

REEP4 (H-12) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 174-207 within an internal region of REEP4 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

REEP4 (H-12) is available conjugated to agarose (sc-398191 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398191 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398191 PE), fluorescein (sc-398191 FITC), Alexa Fluor® 488 (sc-398191 AF488), Alexa Fluor® 546 (sc-398191 AF546), Alexa Fluor® 594 (sc-398191 AF594) or Alexa Fluor® 647 (sc-398191 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398191 AF680) or Alexa Fluor® 790 (sc-398191 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-398191 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

REEP4 (H-12) is recommended for detection of REEP4 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for REEP4 siRNA (h): sc-77726, REEP4 siRNA (m): sc-152793, REEP4 shRNA Plasmid (h): sc-77726-SH, REEP4 shRNA Plasmid (m): sc-152793-SH, REEP4 shRNA (h) Lentiviral Particles: sc-77726-V and REEP4 shRNA (m) Lentiviral Particles: sc-152793-V.

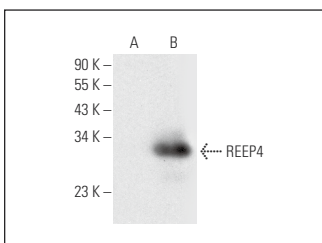
Molecular Weight of REEP4: 29 kDa.

Positive Controls: REEP4 (h): 293T Lysate: sc-113048.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



REEP4 (H-12): sc-398191. Western blot analysis of REEP4 expression in non-transfected: sc-117752 (A) and human REEP4 transfected: sc-113048 (B) 293T whole cell lysates.

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 for detailed protocols and support products.

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