

REEP6 (B-12): sc-374167

BACKGROUND

Members of the REEP (receptor expression enhancing protein) family contain a TB2/DP1 and a HVA22 domain, which are involved in intracellular trafficking and secretion. REEP6 (receptor expression enhancing protein 6), also known as receptor accessory protein 6, DP1L1 or TB2L1, is a 184 amino acid multi-pass membrane protein belonging to the DP1 family. REEP6 may enhance the cell surface expression of odorant receptors and may interact with odorant receptor proteins. The gene encoding REEP6 maps to human chromosome 19, which consists of over 63 million bases, houses approximately 1,400 genes and is recognized for having the greatest gene density of the human chromosomes. It is the genetic home for a number of immunoglobulin (Ig) superfamily members, including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEACAM and PSG family and Fc receptors (FcRs).

REFERENCES

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3. Sato, H., et al. 2005. Deleted in polyposis 1-like 1 gene (Dp111): a novel gene richly expressed in retinal ganglion cells. *Invest. Ophthalmol. Vis. Sci.* 46: 791-796.
4. Züchner, S., et al. 2006. Mutations in the novel mitochondrial protein REEP1 cause hereditary spastic paraplegia type 31. *Am. J. Hum. Genet.* 79: 365-369.
5. Castermans, D., et al. 2007. Identification and characterization of the TRIP8 and REEP3 genes on chromosome 10q21.3 as novel candidate genes for autism. *Eur. J. Hum. Genet.* 15: 422-431.
6. Beetz, C., et al. 2008. REEP1 mutation spectrum and genotype/phenotype correlation in hereditary spastic paraplegia type 31. *Brain* 131: 1078-1086.
7. Du, J., et al. 2009. Receptor expression-enhancing protein 1 gene (SPG31) mutations are rare in Chinese Han patients with hereditary spastic paraplegia. *Chin. Med. J.* 122: 2064-2066.

CHROMOSOMAL LOCATION

Genetic locus: REEP6 (human) mapping to 19p13.3.

SOURCE

REEP6 (B-12) is a mouse monoclonal antibody raised against a peptide mapping near the C-terminus of REEP6 of human origin.

PRODUCT

Each vial contains 200 µg IgG₃ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-374167 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

REEP6 (B-12) is recommended for detection of REEP6 of 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 REEP6 siRNA (h): sc-97151, REEP6 shRNA Plasmid (h): sc-97151-SH and REEP6 shRNA (h) Lentiviral Particles: sc-97151-V.

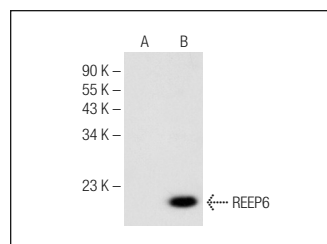
Molecular Weight of REEP6: 21 kDa.

Positive Controls: PC-3 cell lysate: sc-2220, A-673 cell lysate: sc-2414 or REEP6 (h): 293T Lysate: sc-110960.

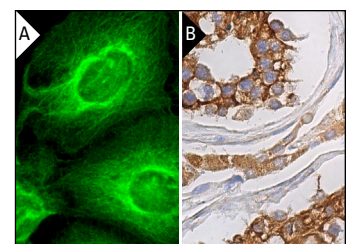
RECOMMENDED SUPPORT REAGENTS

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. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



REEP6 (B-12): sc-374167. Western blot analysis of REEP6 expression in non-transfected: sc-117752 (A) and human REEP6 transfected: sc-110960 (B) 293T whole cell lysates.



REEP6 (B-12): sc-374167. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoskeletal localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing membrane and cytoplasmic staining of cells in seminiferous ducts and cytoplasmic staining of Leydig cells (B).

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.