SANTA CRUZ BIOTECHNOLOGY, INC.

REEP6 (H-9): sc-393569

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 (Dp1l1): 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; Reep6 (mouse) mapping to 10 C1.

SOURCE

REEP6 (H-9) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 1-18 at the N-terminus of REEP6 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} 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-393569 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

REEP6 (H-9) is recommended for detection of REEP6 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 REEP6 siRNA (h): sc-97151, REEP6 siRNA (m): sc-152795, REEP6 shRNA Plasmid (h): sc-97151-SH, REEP6 shRNA Plasmid (m): sc-152795-SH, REEP6 shRNA (h) Lentiviral Particles: sc-97151-V and REEP6 shRNA (m) Lentiviral Particles: sc-152795-V.

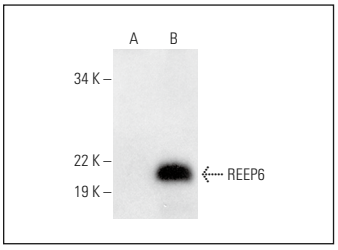
Molecular Weight of REEP6: 21 kDa.

Positive Controls: 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.

DATA



REEP6 (H-9): sc-393569. Western blot analysis of REEP6 expression in non-transfected: sc-117752 (**A**) and human REEP6 transfected: sc-110960 (**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.