

REEP1 (Q-12): sc-133401

BACKGROUND

Transport of G protein-coupled receptors (GPCRs) to the cell surface membrane is critical for receptor-ligand recognition. Mammalian GPCR odorant receptors (ORs), when heterologously expressed in cells, are poorly expressed on the cell surface. REEP1 (receptor expression-enhancing protein 1), is a 201 amino acid multi-pass mitochondrion membrane protein that belongs to the DP1 family. REEP1 interacts with odorant receptor proteins and may enhance the cell surface expression of odorant receptors. Mutations in the REEP1 gene are the third most common cause of hereditary spastic paraplegia (HSP) after spastin and atlastin gene mutations. Mutations in the REEP1 gene also cause spastic paraplegia autosomal dominant type 31, a neurodegenerative disorder. The REEP1 gene is conserved in chimpanzee, canine, bovine, mouse, rat, chicken, zebrafish, *A.thaliana* and rice, and maps to human chromosome 2p11.2.

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CHROMOSOMAL LOCATION

Genetic locus: REEP1 (human) mapping to 2p11.2; Reep1 (mouse) mapping to 6 C1.

SOURCE

REEP1 (Q-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of REEP1 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-133401 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

REEP1 (Q-12) is recommended for detection of REEP1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with other REEP family members.

REEP1 (Q-12) is also recommended for detection of REEP1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for REEP1 siRNA (h): sc-94388, REEP1 siRNA (m): sc-152790, REEP1 shRNA Plasmid (h): sc-94388-SH, REEP1 shRNA Plasmid (m): sc-152790-SH, REEP1 shRNA (h) Lentiviral Particles: sc-94388-V and REEP1 shRNA (m) Lentiviral Particles: sc-152790-V.

Molecular Weight of REEP1: 22 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 or rat testis extract: sc-2400.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.


 MONOS
 Satisfaction
 Guaranteed

Try **REEP1 (A-8): sc-393242**, our highly recommended monoclonal alternative to REEP1 (Q-12).