

REP15 (E-19): sc-248390

BACKGROUND

REP15 (rab15 effector protein) is a 236 amino acid protein that localizes to early endosome membrane. REP15 is a binding partner of a RAB GTPase family member, RAB15, that facilitates transferrin receptor recycling from the endocytic recycling compartment. REP15 interaction with RAB15 may require multiple binding sites or a structural motif requiring full-length REP15. REP15 co-localizes with RAB15 and RAB11 on recycling endosomes, but not with RAB15, RAB4 or EEA1 on early endosomes. Although REP15 does not interact with RAB11, the two proteins have similar functions; both regulate vesicular trafficking from recycling endosomes to the plasma membrane. The REP15 gene is conserved in chimpanzee, cow, mouse and rat, and maps to human chromosome 12p11.22.

REFERENCES

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- Zumkeller, W., et al. 2004. Genotype/phenotype analysis in a patient with pure and complete trisomy 12p. *Am. J. Med. Genet. A* 129A: 261-264.
- Elferink, L.A., et al. 2005. Functional properties of rab15 effector protein in endocytic recycling. *Meth. Enzymol.* 403: 732-743.
- Strick, D.J., et al. 2005. Rab15 effector protein: a novel protein for receptor recycling from the endocytic recycling compartment. *Mol. Biol. Cell* 16: 5699-5709.
- Segel, R., et al. 2006. The natural history of trisomy 12p. *Am. J. Med. Genet. A* 140: 695-703.
- Online Mendelian Inheritance in Man, OMIM[™]. 2007. Johns Hopkins University, Baltimore, MD. MIM Number: 610848. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- SWISS-PROT/TrEMBL (Q6BDI9). World Wide Web URL: <http://www.uniprot.org/uniprot/Q6BDI9>

CHROMOSOMAL LOCATION

Genetic locus: Rep15 (mouse) mapping to 6 G3.

SOURCE

REP15 (E-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of REP15 of mouse 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-248390 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

REP15 (E-19) is recommended for detection of REP15 of mouse and rat origin by Western Blotting (starting dilution 1:200, 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 REP15 siRNA (m): sc-152804, REP15 shRNA Plasmid (m): sc-152804-SH and REP15 shRNA (m) Lentiviral Particles: sc-152804-V.

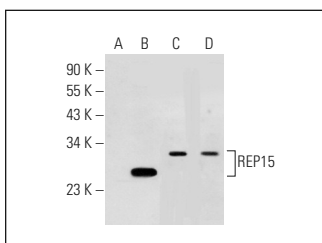
Molecular Weight of REP15: 27 kDa.

Positive Controls: REP15 (m): 293T Lysate: sc-123068.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



REP15 (E-19): sc-248390. Western blot analysis of REP15 expression in non-transfected 293T: sc-117752 (A), mouse REP15 transfected 293T: sc-123068 (B) and MDA-MB-435 (C) whole cell lysates and human kidney tissue extract (D).

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.