

rabphilin-11 (P-14): sc-162071

BACKGROUND

Rabphilin-11, also known as WDR44 (WD repeat-containing protein 44), is a 913 amino acid protein that contains 7 WD repeats and may be involved in vesicle and endosome recycling. Acting as a downstream effector for Rab 11, rabphilin-11 colocalizes with Rab 11 along microtubules oriented toward lamellipodia. The Rab 11 protein localizes to sorting endosomes, recycling endosomes, *trans*-Golgi network membranes and post-Golgi secretory vesicles, and is implicated in vesicle recycling. Although rabphilin-11 interacts with the GTP-bound form of Rab 11 during membrane association, rabphilin-11 does not bind to other Rab and Rho small G proteins. Rabphilin-11 is phosphorylated upon DNA damage, probably by Atm or ATR. Existing as three alternatively spliced isoforms, the rabphilin-11 gene is conserved in chimpanzee, canine, bovine, mouse, rat, chicken, zebrafish and *C. elegans*, and maps to human chromosome Xq24.

REFERENCES

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2. Zeng, J., et al. 1999. Identification of a putative effector protein for rab11 that participates in transferrin recycling. *Proc. Natl. Acad. Sci. USA* 96: 2840-2845.
3. Mammoto, A., et al. 2000. Physical and functional interaction of rabphilin-11 with mammalian Sec13 protein. Implication in vesicle trafficking. *J. Biol. Chem.* 275: 13167-13170.
4. Prekeris, R., et al. 2001. Identification of a novel Rab11/25 binding domain present in Eferin and Rip proteins. *J. Biol. Chem.* 276: 38966-38970.
5. Ross, M.T., et al. 2005. The DNA sequence of the human X chromosome. *Nature* 434: 325-337.
6. Olsen, J.V., et al. 2006. Global, *in vivo*, and site-specific phosphorylation dynamics in signaling networks. *Cell* 127: 635-648.
7. Matsuoka, S., et al. 2007. ATM and ATR substrate analysis reveals extensive protein networks responsive to DNA damage. *Science* 316: 1160-1166.

CHROMOSOMAL LOCATION

Genetic locus: WDR44 (human) mapping to Xq24; Wdr44 (mouse) mapping to X A2.

SOURCE

rabphilin-11 (P-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of rabphilin-11 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-162071 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

rabphilin-11 (P-14) is recommended for detection of rabphilin-11 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).

rabphilin-11 (P-14) is also recommended for detection of rabphilin-11 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for rabphilin-11 siRNA (h): sc-91212, rabphilin-11 siRNA (m): sc-152670, rabphilin-11 shRNA Plasmid (h): sc-91212-SH, rabphilin-11 shRNA Plasmid (m): sc-152670-SH, rabphilin-11 shRNA (h) Lentiviral Particles: sc-91212-V and rabphilin-11 shRNA (m) Lentiviral Particles: sc-152670-V.

Molecular Weight of rabphilin-11 isoform 1: 101 kDa.

Molecular Weight of rabphilin-11 isoform 2: 100 kDa.

Molecular Weight of rabphilin-11 isoform 3: 49 kDa.

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.

PROTOCOLS

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