SANTA CRUZ BIOTECHNOLOGY, INC.

Rabex-5 (H-288): sc-68344

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Rabex-5 (Rab 5 GDP/GTP exchange factor), also known as RABGEF1, RAP1 or RABAPTIN-5-associated exchange factor for Rab 5, is a Rab guanine nucleotide exchange factor. Rabex-5 localizes to the cytoplasm and can associate with early endosomes. It consists of an N-terminal zinc finger domain, a GEF domain, an EET (early endosomal targeting) domain and a coiled-coil domain. The EET domain is important for the association of Rabex-5 with early endosomes and for the activation of Rab 5. Truncated Rabex-5 that is missing its EET domain can still function via an association with RABAPTIN-5. The Rabex-5/RABAPTIN-5 complex can target to early endosomes in a Rab 5-dependent manner through the binding of Rab5-GTP to RABAPTIN-5. *In vitro,* Rabex-5 exhibits GEF activity on its own, however, its association with RABAPTIN-5 increases its efficiency.

CHROMOSOMAL LOCATION

Genetic locus: RABGEF1 (human) mapping to 7q11.21; Rabgef1 (mouse) mapping to 5 G1.3.

SOURCE

Rabex-5 (H-288) is a rabbit polyclonal antibody raised against amino acids 421-708 mapping at the C-terminus of Rabex-5 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.

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.

APPLICATIONS

Rabex-5 (H-288) is recommended for detection of Rabex-5 of mouse, rat and human 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).

Rabex-5 (H-288) is also recommended for detection of Rabex-5 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Rabex-5 siRNA (h): sc-62920, Rabex-5 siRNA (m): sc-62921, Rabex-5 shRNA Plasmid (h): sc-62920-SH, Rabex-5 shRNA Plasmid (m): sc-62921-SH, Rabex-5 shRNA (h) Lentiviral Particles: sc-62920-V and Rabex-5 shRNA (m) Lentiviral Particles: sc-62921-V.

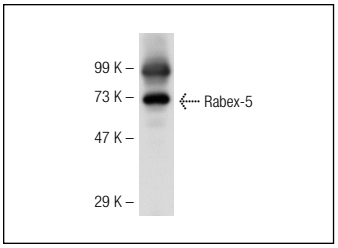
Molecular Weight of Rabex-5: 60 kDa.

Positive Controls: KNRK whole cell lysate: sc-2214, NIH/3T3 whole cell lysate: sc-2210 or MIA PaCa-2 cell lysate: sc-2285.

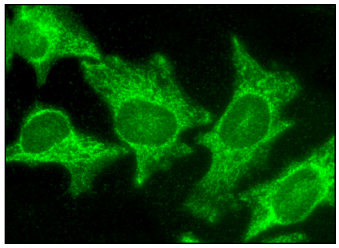
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Rabex-5 (H-288): sc-68344. Western blot analysis of Rabex-5 expression in MIA PaCa-2 whole cell lysate.



Rabex-5 (H-288): sc-68344. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

1. Hasegawa, T., et al. 2011. The AAA-ATPase VPS4 regulates extracellular secretion and lysosomal targeting of α-synuclein. PLoS ONE 6: e29460.

PROTOCOLS

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