# Rab 7L1 (L-13): sc-138574



The Power to Question

## **BACKGROUND**

The Ras-related superfamily of guanine nucleotide binding proteins includes the R-Ras, Rap, Ral/Rec and Rho/Rab subfamilies. Increasing data suggests an important role for Rab proteins in either endocytosis or in biosynthetic protein transport. The process of transporting newly synthesized proteins from the endoplasmic reticulum (ER) to various stacks of the Golgi complex and to secretory vesicles involves the movement of carrier vesicles and requires Rab protein function. Rab proteins are also an integral part of endocytic pathways. Rab 7L1, also known as RAB7L, is a 203 amino acid, ubiquitously expressed member of the Rab family of proteins that localizes to the cell membrane. Rab 7L1 contains four GTP-binding domains and shares 35% identity with Rab 7 and 94% identity with the rat protein Rab 29. In addition, Rab 7L1 is often used as a marker of T cells.

## **CHROMOSOMAL LOCATION**

Genetic locus: RAB7L1 (human) mapping to 1q32.1; Rab7l1 (mouse) mapping to 1 E4.

## **SOURCE**

Rab 7L1 (L-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of Rab 7L1 of human origin.

## **PRODUCT**

Each vial contains 100  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-138574 P, (100  $\mu$ g 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**

Rab 7L1 (L-13) is recommended for detection of Rab 7L1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Rab 7L1 (L-13) is also recommended for detection of Rab 7L1 in additional species, including canine.

Suitable for use as control antibody for Rab 7L1 siRNA (h): sc-88818, Rab 7L1 siRNA (m): sc-152650, Rab 7L1 shRNA Plasmid (h): sc-88818-SH, Rab 7L1 shRNA Plasmid (m): sc-152650-SH, Rab 7L1 shRNA (h) Lentiviral Particles: sc-88818-V and Rab 7L1 shRNA (m) Lentiviral Particles: sc-152650-V.

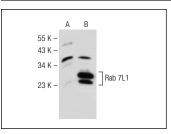
Molecular Weight of Rab 7L1: 23 kDa.

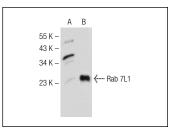
Positive Controls: Jurkat whole cell lysate: sc-2204, Rab 7L1 (m2): 293T Lysate: sc-122915 or Rab 7L1 (h): 293T Lysate: sc-175274.

## **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**





Rab 7L1 (L-13): sc-138574. Western blot analysis of Rab 7L1 expression in non-transfected: sc-117752 (A) and human Rab 7L1 transfected: sc-175274 (B) 293T whole cell lysates.

Rab 7L1 (L-13): sc-138574. Western blot analysis of Rab 7L1 expression in non-transfected: sc-117752 (**A**) and mouse Rab 7L1 transfected: sc-122915 (**B**) 293T whole cell lysates.

## **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.



Try Rab 7L1 (D-8): sc-398274 or Rab 7L1 (31-E): sc-81924, our highly recommended monoclonal alternatives to Rab 7L1 (L-13).

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