The Ras-related superfamily of guanine nucleotide binding proteins includes the R-Ras, Rap, Rap/Rec and Rho/Rab subfamilies all of which are thought to play an important role 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 14, also known as FBP, is a 215 amino acid protein that is lipid-anchored to the cytoplasmic side of the cell membrane. One of several members of the Rab subfamily of small GTPases, Rab 14 is thought to be involved in vesicular trafficking and neurotransmitter release throughout the body and is expressed at high levels in brain, lung, kidney, spleen and thymus.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: Rab14 (human) mapping to 9q33.2; Rab14 (mouse) mapping to 2 B.

**SOURCE**

Rab 14 (D-5) is a mouse monoclonal antibody raised against amino acids 181-215 mapping at the C-terminus of Rab 14 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG1 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.

**APPLICATIONS**

Rab 14 (D-5) is recommended for detection of Rab 14 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Rab 14 (D-5) is also recommended for detection of Rab 14 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Rab 14 siRNA (h): sc-76312, Rab 14 siRNA (m): sc-76313, Rab 14 shRNA Plasmid (h): sc-76312-SH, Rab 14 shRNA Plasmid (m): sc-76313-SH, Rab 14 shRNA (h) Lentiviral Particles: sc-76312-V and Rab 14 shRNA (m) Lentiviral Particles: sc-76313-V.

Molecular Weight of Rab 14: 24 kDa.

Positive Controls: Raji whole cell lysate: sc-364236, HeLa whole cell lysate: sc-2200 or Hep G2 cell lysate: sc-2227.

**DATA**

Rab 14 (D-5): sc-271401. Western blot analysis of Rab 14 expression in Hep G2 (A), HeLa (B), Raji (C) and NIH/3T3 (D) whole cell lysates.

Rab 14 (D-5): sc-271401. Immunoperoxidase staining of Rab 14 expression in Hep G2 (A), HeLa (B), Raji (C) and NIH/3T3 (D) whole cell lysates.

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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

**PROTOCOLS**

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