

Rabex-5 Antibody

Purified Rabbit Polyclonal Antibody Catalog # ABV11566

Specification

Rabex-5 Antibody - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Isotype
Calculated MW

WB
O9UJ41
Human, Mouse, Rat
Rabbit
Polyclonal
Rabbit IgG
56891

Rabex-5 Antibody - Additional Information

Gene ID 27342

Other Names

Rab5 GDP/GTP exchange factor

Target/Specificity

Rabex-5

Formulation

 $100 \mu g$ (0.5 mg/ml) of antibody in PBS, 0.01 % BSA, 0.01 % thimerosal, and 50 % glycerol, pH 7.2

Handling

The antibody solution should be gently mixed before use.

Background Descriptions

Precautions

Rabex-5 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Rabex-5 Antibody - Protein Information

Name RABGEF1

Synonyms RABEX5

Function

Rab effector protein acting as linker between gamma-adaptin, RAB4A or RAB5A. Involved in endocytic membrane fusion and membrane trafficking of recycling endosomes. Stimulates nucleotide exchange on RAB5A. Can act as a ubiquitin ligase (By similarity).

Cellular Location



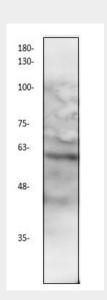
Cytoplasm. Early endosome. Recycling endosome

Rabex-5 Antibody - Protocols

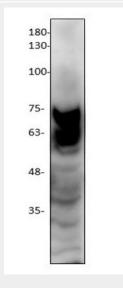
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Rabex-5 Antibody - Images



Western blot of 3T3 lysate with Rabex-5.



Western blot of Rat kidney lysate with Rabex-5





Rabex-5 Antibody - Background

Rabex-5, also called RabGEF1 and RAP1, was identified as a guanine nucleotide exchange factor (GEF) for Rab5, a member of the Ras superfamily of small Rab GTPases (1). Rabex-5 generates the GTP-bound active form of Rab5 and forms a tight association with its effector protein Rabaptin-5. This complex localizes to endosomal membranes where it functions as a key regulator of vesicular trafficking during early endocytosis. Rabex-5 is also monoubiquitinated and has ubiquitin ligase activity that regulates its recruitment to early endosomes. The conformational change between Rab5 GTP/GDP states is essential for its biological function as a rate limiting regulator at multiple steps during endocytosis. Through its control of endosomal trafficking and endocytosis, Rabex-5 has been shown to negatively regulate NGF-mediated neurite outgrowth as well as FcERI-dependent mast cell activation.