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RABEX5 Antibody

Catalog # ASC11295

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q9UJ41
Other Accession	NP_055319, 7657496
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	56891
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	RABEX5 antibody can be used for detection of RABEX5 by Western blot at 1 g/mL. Antibody can also be used for immunohistochemistry starting at 5 g/mL. For immunofluorescence start at 20 g/mL.

Additional Information

Gene ID	27342
Other Names	Rab5 GDP/GTP exchange factor, RAP1, Rabaptin-5-associated exchange factor for Rab5, Rabex-5, RABGEF1, RABEX5
Target/Specificity	RABGEF1; At least four isoforms of RABEX5 are known to exist; this antibody will recognize all four. RABEX5 antibody is predicted to not cross-react with other LRRFIP family members.
Reconstitution & Storage	RABEX5 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	RABEX5 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	RABGEF1 (HGNC:17676)
Synonyms	RABEX5
Function	Acts as a guanine-nucleotide releasing factor (GEF) for RAB5A by promoting the conversion of inactive RAB-GDP to the active form RAB- GTP (PubMed:15339665, PubMed:9323142). Forms a complex with RABEP1 that acts as Rab4/Rab5 effector regulating endosome fusion. Involved in endocytic membrane fusion and membrane trafficking of recycling endosomes

(PubMed:11452015, PubMed:9323142). Also functions as a ubiquitin ligase (By similarity).

Cellular Location Cytoplasm. Early endosome. Recycling endosome

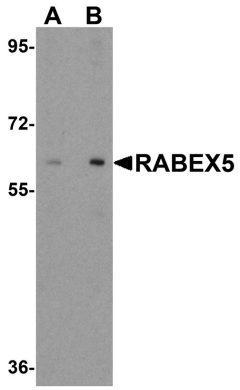
Background

RABEX5 Antibody: RABEX5 is a guanine nucleotide exchange factor (GEF) that forms a complex with rabaptin-5 and specifically activates Rab5, a small GTPase that plays an essential role in endocytic traffic. RABEX-5 is thought to also interact with another member of the Rab family, Rab22, which targets RABEX5 to early endosomes, allowing it to activate Rab5 and thereby promote Rab5-mediated endosome fusion.

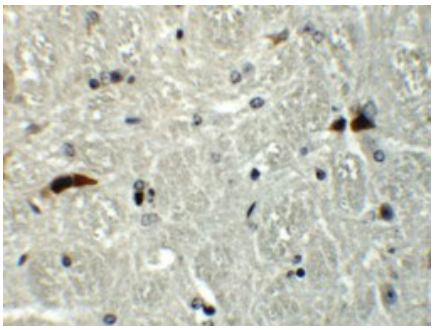
References

Horiuchi H, Lippe R, McBride HM, et al. A novel Rab5 GDP/GTP exchange factor complexed to Rabaptin-5 links nucleotide exchange to effector recruitment and function. Cell 1997; 90:1149-59.
Zhu H, Liang Z, and Li G. Rabex-5 is a Rab22 effector and mediates a Rab22-Rab5 signaling cascade in endocytosis. Mol. Biol. Cell 2009; 20:4720-9.

Images

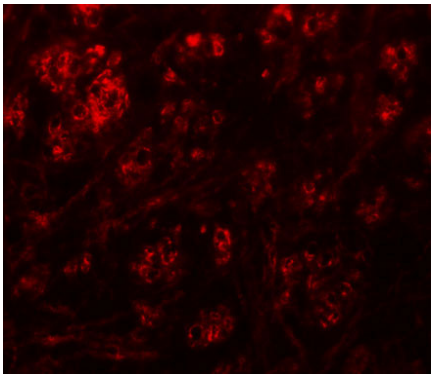


Western blot analysis of RABEX5 in human liver tissue lysate with RABEX5 antibody at (A) 1 and (B) 2 µg/mL.



Immunohistochemistry of RABEX5 in mouse brain tissue with RABEX5 antibody at 5 µg/mL.

Immunofluorescence of RABEX5 in mouse brain tissue with RABEX5 antibody at 20 µg/mL.



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