Echelon Biosciences Inc.

Vac14 antibody, polyclonal

Z-RV14

Support: echelon@echelon-inc.com

Description:
Rabbit polyclonal antibody to human Vac14 with reactivity to mouse/rat and human Vac14

Applications:
IF/ICC – 2-5 ug/mL
Western – 1.0 ug/mL
Immunoprecipitation – 1.0 ug/mL

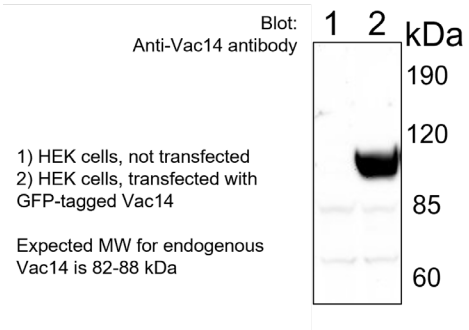
Other in vitro and cellular applications are possible using this antibody, but have not been verified by Echelon Biosciences.

Properties:
Form – liquid
Storage instructions – protect from direct light and store at 4°C for up to 30 days. For long term storage, aliquot and store at -80°C. Avoid repeated freeze/thaw cycles.
Storage buffer – PBS, pH 7.4
Concentration – 0.5 or 1.0 ug/mL. See label for lot specific information.
Purity – affinity purified using Protein A chromatography
Immunogen – synthetic fusion peptide of aa 523 to 782
Clonality – polyclonal
Isotype - IgG

Specificity:
The Vac14 antibody is directed at an C-terminal region of Vac14 and detects mammalian forms of Vac14 with an expected molecular weight of approximately 82-88 kDa.

Background:
Vac14 is a scaffold protein that functions in a complex with PIKfyve and Sac3 (FIG4) to regulate the synthesis and turnover of phosphatidylinositol 3,5-bisphosphate (PI(3,5)P2) on endosomal membranes. The coordinated activity within the complex maintains homeostasis of PI(3)P and PI(5)P and plays a role in the fusion and transport of endosomes.

Data:
Western blot for Vac14 in transfected and untransfected HEK293 cells



References:

1. Lees J, Li P, Kumar N, Weisman L, Reinisch K., (2020) Insights into Lysosomal PI(3,5)P2 Homeostasis from a Structural-Biochemical Analysis of the PIKfyve Lipid Kinase Complex. Mol Cell. 80:1-8

2. Shisheva A, Sbrissa D, Ikonomov O (1999) Cloning, Characterization, and Expression of a Novel Zn21-Binding FYVE Finger-Containing Phosphoinositide Kinase in Insulin-Sensitive Cells. Mol & Cell Bio. 19(1):623-634

3. Sbrissa D, Ikonomov O, Shisheva A et al. (2004) A Mammalian Ortholog of Saccharomyces cerevisiae Vac14 That Associates with and Up-Regulates PIKfyve Phosphoinositide 5-Kinase Activity. Mol & Cell Bio. 24(23): 10437–10447

Related Products:

Products	Catalog Number
Assays and Reagents	
PI(3,5)P2 PolyPIPosomes	Y-P035
PI(3,5)P2 PIP Beads	P-B035a
Aplilimod	B-0308
Lipids and Antibodies	
diC16, diC8 PI(3,5)P2	P-3516, P-3508
Anti-PI(3,5)P2 Anti-PIKfyve	Z-P035 Z-RPK5

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