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RAMP3 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16029b

Product Information

Application	WB, E
Primary Accession	O60896
Other Accession	NP_005847.1
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB35012
Calculated MW	16518
Antigen Region	90-118

Additional Information

Gene ID	10268
Other Names	Receptor activity-modifying protein 3, Calcitonin-receptor-like receptor activity-modifying protein 3, CRLR activity-modifying protein 3, RAMP3
Target/Specificity	This RAMP3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 90-118 amino acids from the C-terminal region of human RAMP3.
Dilution	WB~~1:2000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	RAMP3 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	RAMP3 (HGNC:9845)
Function	Accessory protein that interacts with and modulates the function of G-protein coupled receptors including calcitonin gene- related peptide type 1 receptor (CALCRL), calcitonin receptor (CALCR) and G-protein coupled

	estrogen receptor 1 (GPER1) (PubMed:23674134, PubMed:9620797). Required for the transport of CALCRL and GPER1 receptors to the plasma membrane (PubMed:23674134, PubMed:9620797). Plays a role in cardioprotection by reducing cardiac hypertrophy and perivascular fibrosis in a GPER1-dependent manner (PubMed:23674134). Together with CALCRL, form a receptor complex for adrenomedullin/ADM and intermedin/ADM2 (PubMed:32296767). Together with CALCR, act as a receptor complex for amylin/IAPP (PubMed:35324283).
Cellular Location	Cell membrane; Single-pass type I membrane protein. Membrane; Single-pass type I membrane protein. Note=Moves from intracellular puncta to the plasma membrane in a RAMP3-dependent manner
Tissue Location	Strongly expressed in lung, breast, immune system and fetal tissues.

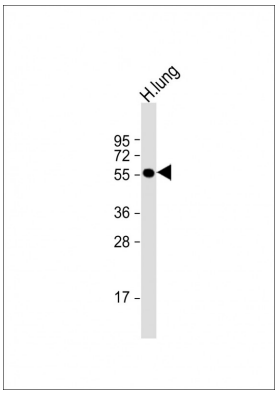
Background

The protein encoded by this gene is a member of the RAMP family of single-transmembrane-domain proteins, called receptor (calcitonin) activity modifying proteins (RAMPs). RAMPs are type I transmembrane proteins with an extracellular N terminus and a cytoplasmic C terminus. RAMPs are required to transport calcitonin-receptor-like receptor (CRLR) to the plasma membrane. CRLR, a receptor with seven transmembrane domains, can function as either a calcitonin-gene-related peptide (CGRP) receptor or an adrenomedullin receptor, depending on which members of the RAMP family are expressed. In the presence of this (RAMP3) protein, CRLR functions as an adrenomedullin receptor.

References

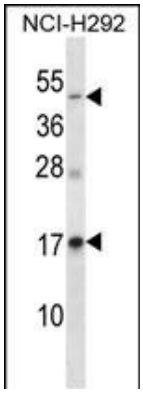
Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Bailey, R.J., et al. Peptides 31(4):579-584(2010)
Harikumar, K.G., et al. Biochemistry 48(49):11773-11785(2009)
Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)
Kuwasako, K., et al. Biochem. Biophys. Res. Commun. 377(1):109-113(2008)

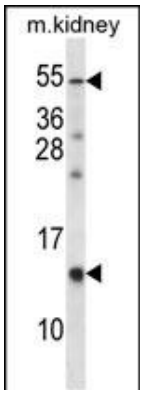
Images



Anti-RAMP3 Antibody (C-term) at 1:1000 dilution + human lung lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 17 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

RAMP3 Antibody (C-term) (Cat. #AP16029b) western blot analysis in NCI-H292 cell line lysates (35ug/lane).This demonstrates the RAMP3 antibody detected the RAMP3 protein (arrow).





RAMP3 Antibody (C-term) (Cat. #AP16029b) western blot analysis in mouse kidney tissue lysates (35ug/lane).This demonstrates the RAMP3 antibody detected the RAMP3 protein (arrow).

Citations

- Adrenomedullin Inhibits Osmotic Water Permeability in Rat Inner Medullary Collecting Ducts