Mouse RAMP2 Antibody

Monoclonal Rat IgG_{2A} Clone # 773816

Catalog Number: MAB6500

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse RAMP2 in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human RAMP2 is observed.
Source	Monoclonal Rat IgG_{2A} Clone # 773816
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	*E. coli*-derived recombinant mouse RAMP2 Ser45-Val159 Accession # Q9WUP0
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 μm filtered solution in PBS.

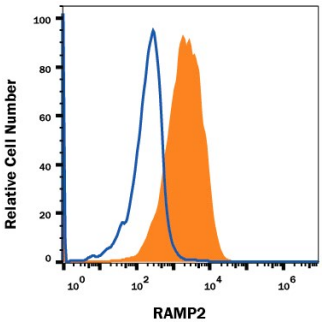
APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Flow Cytometry	0.25 µg/10^6 cells	See Below
Immunohistochemistry	8-25 µg/mL	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

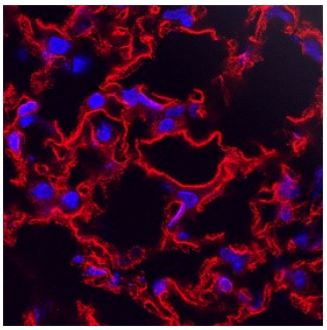
DATA

Flow Cytometry



Detection of RAMP2 in bEnd.3 Mouse Cell Line by Flow Cytometry. bEnd.3 mouse endothelioma cell line was stained with Rat Anti-Mouse RAMP2 Monoclonal Antibody (Catalog # MAB6500, filled histogram) or isotype control antibody (Catalog # MAB006, open histogram), followed by Allophycocyanin-conjugated Anti-Rat IgG Secondary Antibody (Catalog # F0113).

Immunohistochemistry



RAMP2 in Mouse Lung. RAMP2 was detected in perfusion fixed frozen sections of mouse lung using Rat Anti-Mouse RAMP2 Monoclonal Antibody (Catalog # MAB6500) at 25 µg/mL overnight at 4 °C. Tissue was stained using the NorthernLights™ 557-conjugated Anti-Rat IgG Secondary Antibody (red; Catalog # NL013) and counterstained with DAPI (blue). Specific staining was localized to epithelial cells. View our protocol for Fluorescent IHC Staining of Frozen Tissue Sections.

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

RAMP2 (receptor activity modifying protein 2) is a 20 kDa member of the RAMP family of proteins. It is expressed on cardiomyocytes, vascular smooth muscle cells and endothelium and interacts with CRLR to form a receptor complex for adrenomedullin (AM). AM induces vasodilation on AM1 receptor expressing cells. Mature mouse RAMP2 is a 145 amino acid (aa) type I transmembrane glycoprotein that contains a 115 aa extracellular domain (ECD) (aa 45-159) and a nine aa cytoplasmic region. Although the ECD contains no typical structural motifs, based on human, aa 100-106 are critical for AM binding. Over aa 45-159, mouse RAMP2 shares 57% and 83% aa identity with human and rat RAMP2, respectively.

bio-techne
bio-techne.com
Global info@bio-techne.com techsupport@bio-techne.com
North America TEL 800 343 7475 Europe | Middle East | Africa TEL +44 (0)1235 529449
China info.cn@bio-techne.com TEL +86 (21) 52380373
Rest of World bio-techne.com/find-us/distributors TEL +1 612 379 2956