

DESCRIPTION

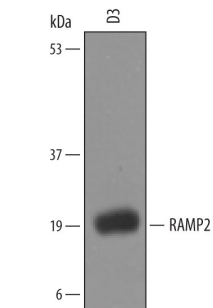
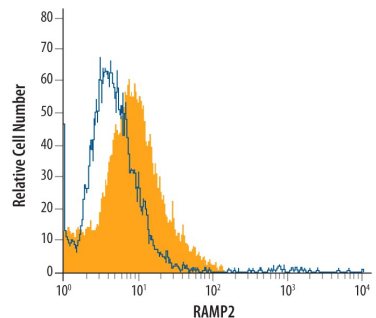
Species Reactivity	Mouse
Specificity	Detects mouse RAMP2 in direct ELISAs and Western blots. In direct ELISAs, approximately 25% cross-reactivity with recombinant human (rh) RAMP2 is observed, and less than 1% cross-reactivity with rhRAMP1 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -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 either lyophilized or 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
Western Blot	1 µg/mL	See Below
Flow Cytometry	2.5 µg/10 ⁶ cells	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

DATA

<p>Western Blot</p>  <p>Detection of Mouse RAMP2 by Western Blot. Western blot shows lysates of D3 mouse embryonic stem cell line. PVDF Membrane was probed with 1 µg/mL of Mouse RAMP2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6500) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for RAMP2 at approximately 20 kDa (as indicated). This experiment was conducted under reducing conditions and using <i>Immunoblot Buffer Group 9</i>.</p>	<p>Flow Cytometry</p>  <p>Detection of RAMP2 in bEnd.3 Mouse Cell Line by Flow Cytometry. bEnd.3 mouse endothelioma cell line was stained with Mouse RAMP2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6500, filled histogram) or control antibody (Catalog # 5-001-A, open histogram), followed by NorthernLights™ 557-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # NL010).</p>
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PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 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. <ul style="list-style-type: none"> ● 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.