



[Go to Product page](#)

Datasheet for ABIN968488

## anti-AP2M1 antibody (AA 110-230)

2 Images

2 Publications

### Overview

Quantity:	150 µg
Target:	AP2M1
Binding Specificity:	AA 110-230
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This AP2M1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF)

### Product Details

Immunogen:	Mouse AP50/mu2 aa. 110-230
Clone:	31-AP50
Isotype:	IgG1
Cross-Reactivity:	Rat (Rattus), Human
Characteristics:	<ol style="list-style-type: none"><li>1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.</li><li>2. Please refer to us for technical protocols.</li><li>3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.</li><li>4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.</li></ol>
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity

## Product Details

---

chromatography.

## Target Details

---

Target: AP2M1

Alternative Name: AP50 ([AP2M1 Products](#))

Background: Sorting of integral membrane proteins is mediated vesicular trafficking between a variety of organelles. Two sorting signals are tyrosine-based and dileucine-based signals that interact with heterotetrameric adaptor protein complexes (AP-1, AP-2, AP-3, and AP-4), which are associated with the vesicle coats. These coatomers contain two large adaptin proteins (gamma, alpha, delta, epsilon, and beta1, beta2, beta3, beta4 respectively) that are noncovalently linked to one medium chain ( $\mu$ 1,  $\mu$ 2,  $\mu$ 3,  $\mu$ 4 respectively) and one small chain (sigma1, sigma2, sigma3, sigma4 respectively). The AP-1 and AP-3 complexes are involved in protein sorting from the TGN and endosomes, while AP-2,  $\mu$ 2 (AP50) interacts with integral membrane proteins via binding to tyrosine-based signals with the canonical motif YXXPhi. In addition, AP50/ $\mu$ 2 is required for both the assembly and the proton transport activity of vacuolar (H<sup>+</sup>)-ATPases in clathrin coated vesicles. Thus, AP50/ $\mu$ 2 may be involved in targeting integral membrane proteins that are sorted based on tyrosine-based signals and involved in assembly of functional ion channels associated with clathrin coated vesicles.

Molecular Weight: 50 kDa

Pathways: [EGFR Signaling Pathway](#), [Neurotrophin Signaling Pathway](#), [EGFR Downregulation](#), [SARS-CoV-2 Protein Interactome](#)

## Application Details

---

Comment: Related Products: ABIN967389, ABIN968545, ABIN968533

Restrictions: For Research Use only

## Handling

---

Format: Liquid

Concentration: 250  $\mu$ g/mL

Buffer: Aqueous buffered solution containing BSA, glycerol, and  $\leq$ 0.09 % sodium azide.

Preservative: Sodium azide

## Handling

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: -20 °C

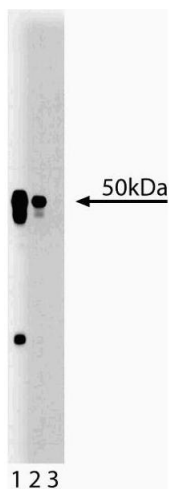
Storage Comment: Store undiluted at -20°C.

## Publications

Product cited in: Vecchi, Polo, Poupon, van de Loo, Benmerah, Di Fiore: "Nucleocytoplasmic shuttling of endocytic proteins." in: **The Journal of cell biology**, Vol. 153, Issue 7, pp. 1511-7, (2001) ([PubMed](#)).

Ohno, Stewart, Fournier, Bosshart, Rhee, Miyatake, Saito, Gallusser, Kirchhausen, Bonifacino: "Interaction of tyrosine-based sorting signals with clathrin-associated proteins." in: **Science (New York, N.Y.)**, Vol. 269, Issue 5232, pp. 1872-5, (1995) ([PubMed](#)).

## Images



### Western Blotting

**Image 1.** Western blot analysis of AP50 on a rat cerebrum lysate. Lane 1: 1:250, lane 2: 1:500, lane 3: 1:1000 dilution of the mouse anti-AP50 antibody.

**Image 2.**

