

## AP2M1 Antibody

*AP2M1: Adaptor-related protein complex 2 mu 1, AP-2 mu-1, mu2, AP50, CLAPM1*

**CATALOG No.: 5161**

### BACKGROUND:

The heterotetrameric coat assembly protein complex, also known as the adaptor-related protein complex 2 (AP-2), belongs to the adaptor complexes medium subunits family (1). The mu 1 subunit of the AP-2 complex (AP2M1) is required for the activity of a vacuolar ATPase, which is responsible for proton pumping occurring in the acidification of endosomes and lysosomes (2,3). AP2M1 has also been shown to associate with the HIV-1 protein Nef, suggesting that Nef may use AP-2 complex to enhance the rate of endocytosis of both CD4 and class I MHC (4). AP2M1 may also play an important role in regulating the intracellular trafficking and function of cytotoxic T-lymphocyte associated (CTLA)-4 protein (5). At least two isoforms of AP2M1 are known to exist.

### SOURCE:

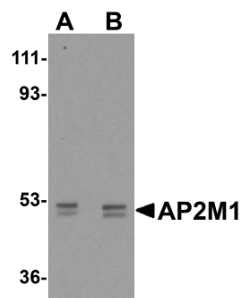
Chicken polyclonal AP2M1 antibody was raised against a 16 amino acid peptide near the carboxy terminus of human AP2M1 (GenBank accession no. NP\_004059).

### AP2M1 LICATION:

AP2M1 antibody can be used for detection of AP2M1 by Western blot at 1 – 2 µg/ml. (Optimal dilution should be determined by user.) Human kidney tissue lysate can be used as positive control. AP2M1 antibody is human, mouse and rat reactive. **For research use only.**

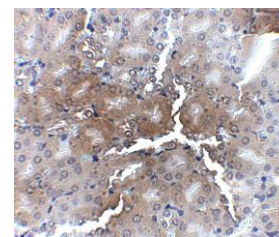
### STORAGE:

AP2M1 antibody is supplied as immunoaffinity purified IgY in PBS containing 0.02% sodium azide. Store at 4°C, stable for one year.



Western blot analysis of AP2M1 in human kidney tissue lysate with AP2M1 antibody at (A) 1 and (B) 2 µg/ml.

Immunohistochemistry of AP2M1 in mouse kidney tissue with AP2M1 antibody at 2.5 µg/ml.



### RELATED PRODUCTS:

Blocking Peptide, Catalog No. **5161P**.  
Human Kidney Tissue Lysate, Catalog No. **1305**.  
CD4 Antibody (9H5A8), Catalog No. **PM-5201**.

### REFERENCES:

1. Robinson MS. Adaptable adaptors for coated vesicles. *Trends Cell Biol.* 2004; 14:167-74.
2. Aguilar RC, Ohno H, Roche KW, et al. Functional domain mapping of the clathrin-associated adaptor medium chains mu1 and mu2. *J. Biol. Chem.* 1997; 272:27160-6.
3. Liu Q, Feng Y, and Forgac M. Activity and in vitro reassembly of the coated vesicle (H<sup>+</sup>)-ATPase requires the 50-kDa subunit of the clathrin assembly complex AP-2. *J. Biol. Chem.* 1994; 269:31592-7.
4. Craig HM, Reddy TR, Riggs NL, et al. Interactions of HIV-1 Nef with the µ subunits of adaptor protein complexes 1, 2, and 3: role of the dileucine-based sorting motif. *Virology* 271:9-17.
5. Interaction of CTLA-4 with the clathrin-associated protein AP50 results in ligand-independent endocytosis that limits cell surface expression. *J. Immunol.* 1997; 159:144-51. (09-01D)