

**Anti-AP2B1 Picoband Antibody**  
**Catalog # ABO10329****Specification**

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**Anti-AP2B1 Picoband Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P63010</a>
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for AP-2 complex subunit beta(AP2B1) detection. Tested with WB in Human;Mouse;Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-AP2B1 Picoband Antibody - Additional Information**

**Gene ID** 163

**Other Names**

AP-2 complex subunit beta, AP105B, Adaptor protein complex AP-2 subunit beta, Adaptor-related protein complex 2 subunit beta, Beta-2-adaptin, Beta-adaptin, Clathrin assembly protein complex 2 beta large chain, Plasma membrane adaptor HA2/AP2 adaptin beta subunit, AP2B1, ADTB2, CLAPB1

**Calculated MW**

104553 MW KDa

**Application Details**

Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

**Subcellular Localization**

Cell membrane . Membrane, coated pit ; Peripheral membrane protein ; Cytoplasmic side . AP-2 appears to be excluded from internalizing CCVs and to disengage from sites of endocytosis seconds before internalization of the nascent CCV.

**Protein Name**

AP-2 complex subunit beta

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Na<sub>3</sub>.

**Immunogen**

E. coli-derived human AP2B1 recombinant protein (Position: Q311-R522). Human AP2B1 shares 100% amino acid (aa) sequence identity with both mouse and rat AP2B1.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins.

**Storage**

**At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

**Anti-AP2B1 Picoband Antibody - Protein Information**

**Name** AP2B1

**Synonyms** ADTB2, CLAPB1

**Function**

Component of the adaptor protein complex 2 (AP-2). Adaptor protein complexes function in protein transport via transport vesicles in different membrane traffic pathways. Adaptor protein complexes are vesicle coat components and appear to be involved in cargo selection and vesicle formation. AP-2 is involved in clathrin-dependent endocytosis in which cargo proteins are incorporated into vesicles surrounded by clathrin (clathrin-coated vesicles, CCVs) which are destined for fusion with the early endosome. The clathrin lattice serves as a mechanical scaffold but is itself unable to bind directly to membrane components. Clathrin-associated adaptor protein (AP) complexes which can bind directly to both the clathrin lattice and to the lipid and protein components of membranes are considered to be the major clathrin adaptors contributing the CCV formation. AP-2 also serves as a cargo receptor to selectively sort the membrane proteins involved in receptor-mediated endocytosis. AP-2 seems to play a role in the recycling of synaptic vesicle membranes from the presynaptic surface. AP-2 recognizes Y-X-X-[FILMV] (Y-X-X-Phi) and [ED]-X-X-X-L- [LI] endocytosis signal motifs within the cytosolic tails of transmembrane cargo molecules. AP-2 may also play a role in maintaining normal post-endocytic trafficking through the ARF6-regulated, non- clathrin pathway. During long-term potentiation in hippocampal neurons, AP-2 is responsible for the endocytosis of ADAM10 (PubMed:<a href="http://www.uniprot.org/citations/23676497" target="\_blank">23676497</a>). The AP-2 beta subunit acts via its C-terminal appendage domain as a scaffolding platform for endocytic accessory proteins; at least some clathrin-associated sorting proteins (CLASPs) are recognized by their [DE]-X(1,2)-F-X-X-[FL]-X-X-X-R motif. The AP-2 beta subunit binds to clathrin heavy chain, promoting clathrin lattice assembly; clathrin displaces at least some CLASPs from AP2B1 which probably then can be positioned for further coat assembly.

**Cellular Location**

Cell membrane. Membrane, coated pit; Peripheral membrane protein; Cytoplasmic side. Note=AP-2 appears to be excluded from internalizing CCVs and to disengage from sites of endocytosis seconds before internalization of the nascent CCV

**Tissue Location**

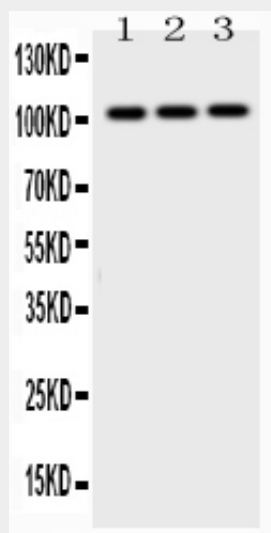
Expressed in the brain (at protein level).

**Anti-AP2B1 Picoband Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### Anti-AP2B1 Picoband Antibody - Images



Western blot analysis of AP2B1 expression in rat testis extract (lane 1), mouse brain extract (lane 2) and MCF-7 whole cell lysates (lane 3). AP2B1 at 104KD was detected using rabbit anti- AP2B1 Antigen Affinity purified polyclonal antibody (Catalog # ABO10329) at 0.5  $\mu$ g/mL. The blot was developed using chemiluminescence (ECL) method .

#### Anti-AP2B1 Picoband Antibody - Background

AP-2 complex subunit beta is a protein that in humans is encoded by the AP2B1 gene. It is mapped to 17q12. The protein encoded by this gene is one of two large chain components of the assembly protein complex 2, which serves to link clathrin to receptors in coated vesicles. The encoded protein is found on the cytoplasmic face of coated vesicles in the plasma membrane. Two transcript variants encoding different isoforms have been found for this gene.