


Product datasheet

Anti-AP2B1 antibody ab75158

1 References 1 Image

Overview

Product name	Anti-AP2B1 antibody
Description	Rabbit polyclonal to AP2B1
Host species	Rabbit
Tested applications	Suitable for: WB, ELISA
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat, Rabbit, Horse, Chicken, Guinea pig, Cow, Cat, Dog, Zebrafish 
Immunogen	Synthetic peptide corresponding to a region of Human AP2B1.
Positive control	Fetal brain lysate.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	Preservative: None Constituents: 2% Sucrose, PBS
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab75158** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use a concentration of 1 µg/ml. Detects a band of approximately 105 kDa (predicted molecular weight: 105 kDa). Good results were obtained when blocked with 5% non-fat dry milk in 0.05% PBS-T.

Application	Abreviews	Notes
ELISA		Use at an assay dependent concentration. ELISA titre using peptide based assay: 1/62500.

Target

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-[L] 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. 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.

Sequence similarities

Belongs to the adaptor complexes large subunit family.

Post-translational modifications

Phosphorylation at Tyr-737 by SRC occurs at the plasma membrane in clathrin-coated vesicles (CCVs).

Cellular localization

Cell membrane. Membrane > coated pit. AP-2 appears to be excluded from internalizing CCVs and to disengage from sites of endocytosis seconds before internalization of the nascent CCV.

Images



Western blot - Anti-AP2B1 antibody (ab75158)

Anti-AP2B1 antibody (ab75158) at 1 μ g/ml +
Fetal brain lysate at 10 μ g

Secondary

HRP conjugated anti-Rabbit IgG at 1/50000
dilution

Predicted band size: 105 kDa

Observed band size: 105 kDa

Additional bands at: 30 kDa, 60 kDa. We
are unsure as to the identity of these extra
bands.

Gel concentration: 6-18%

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