




Product datasheet

Anti-AP-2 complex subunit alpha-1 antibody ab189995

★★★★★ [1 Abreviews](#) [6 References](#) [4 Images](#)

Overview

Product name	Anti-AP-2 complex subunit alpha-1 antibody
Description	Goat polyclonal to AP-2 complex subunit alpha-1
Host species	Goat
Specificity	ab189995 is expected to recognize reported isoform 1 (NP_055018.2) only.
Tested applications	Suitable for: ICC/IF, WB, IHC-P
Species reactivity	Reacts with: Mouse, Human Predicted to work with: Rat, Rabbit, Horse, Guinea pig, Cat, Dog, Pig, Chimpanzee, Gorilla 
Immunogen	Synthetic peptide corresponding to Human AP-2 complex subunit alpha-1 aa 700-800 (internal sequence) (Cysteine residue). NP_055018.2. Database link: O95782  Run BLAST with  Run BLAST with
Positive control	Human brain cortex tissue; HeLa cells, stably expressing a chimeric construct including the brain-specific splice variant of Mouse AP-2 complex subunit alpha-1; Mouse brain lysate and Human Frontal Cortex lysate.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.30 Preservative: 0.02% Sodium azide Constituents: 0.5% BSA, 99% Tris buffered saline

Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab189995 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
ICC/IF	★★★★★ (1)	Use a concentration of 0.1 µg/ml.
WB		Use a concentration of 0.01 - 0.03 µg/ml. Predicted molecular weight: 108 kDa.
IHC-P		Use a concentration of 5 µg/ml.

Target

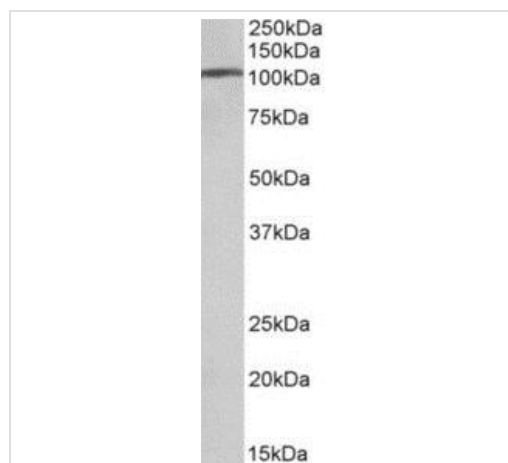
Function Component of the adaptor protein complex 2 (AP-2). Adaptor protein complexes function in protein transport via transport vesicles in different membrane traffic pathways. Adaptor protein complexes are vesicle coat components and appear to be involved in cargo selection and vesicle formation. 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 alpha subunit binds polyphosphoinositide-containing lipids, positioning AP-2 on the membrane. The AP-2 alpha subunit acts via its C-terminal appendage domain as a scaffolding platform for endocytic accessory proteins. The AP-2 alpha and AP-2 sigma subunits are thought to contribute to the recognition of the [ED]-X-X-X-L-[L] motif.

Tissue specificity Isoform A expressed in forebrain, skeletal muscle, spinal cord, cerebellum, salivary gland, heart and colon. Isoform B is widely expressed in tissues and also in breast cancer and in prostate carcinoma cells.

Sequence similarities Belongs to the adaptor complexes large subunit family.

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

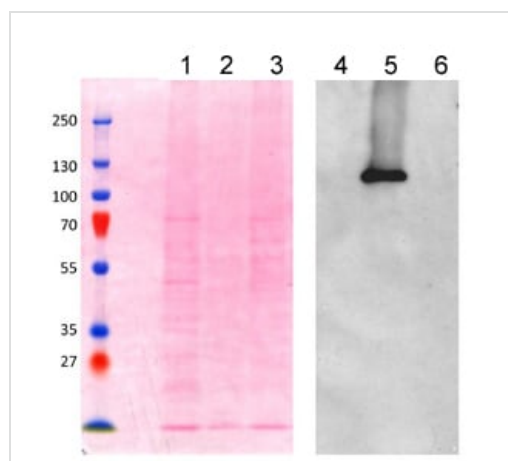


Western blot - Anti-AP-2 complex subunit alpha-1 antibody (ab189995)

Anti-AP-2 complex subunit alpha-1 antibody (ab189995) at 0.01 $\mu\text{g/ml}$ + Human Frontal Cortex lysate at 35 μg

Developed using the ECL technique.

Predicted band size: 108 kDa



Western blot - Anti-AP-2 complex subunit alpha-1 antibody (ab189995)

Lanes 1-3 : total protein blot stained with Ponceau Red

Lanes 4-6 : Anti-AP-2 complex subunit alpha-1 antibody (ab189995) at 0.1 $\mu\text{g/ml}$

Lanes 1 & 4 : Mouse Liver lysate

Lanes 2 & 5 : Mouse Brain lysate

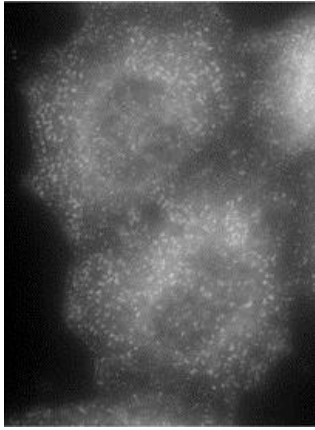
Lanes 3 & 6 : Mouse Kidney lysate

Lysates/proteins at 5 μg per lane.

Developed using the ECL technique.

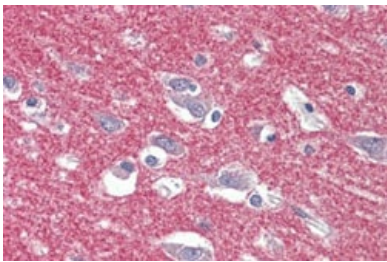
Predicted band size: 108 kDa

The left panel is stained with Ponceau red.



Immunofluorescent analysis of methanol-fixed HeLa cells stably expressing a chimeric construct including the brain-specific splice variant of Mouse AP-2 complex subunit alpha-1 labeling AP-2 complex subunit alpha-1 with ab189995 at 0.1 µg/ml.

Immunocytochemistry/ Immunofluorescence - Anti-AP-2 complex subunit alpha-1 antibody (ab189995)



Immunohistochemical analysis of formalin-fixed, paraffin-embedded Human brain cortex tissue labeling AP-2 complex subunit alpha-1 with ab189995 at 5µg/ml.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AP-2 complex subunit alpha-1 antibody (ab189995)

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