

AP2S1 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP17428C

Specification

AP2S1 Antibody (Center) - Product Information

Application	WB,E
Primary Accession	P53680
Other Accession	P62744 , P62743 , Q17QC5 , NP_004060.2 , NP_067586.1
Reactivity	Human
Predicted	Bovine, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	17018
Antigen Region	36-64

AP2S1 Antibody (Center) - Additional Information

Gene ID 1175

Other Names

AP-2 complex subunit sigma, Adaptor protein complex AP-2 subunit sigma, Adaptor-related protein complex 2 subunit sigma, Clathrin assembly protein 2 sigma small chain, Clathrin coat assembly protein AP17, Clathrin coat-associated protein AP17, HA2 17 kDa subunit, Plasma membrane adaptor AP-2 17 kDa protein, Sigma2-adaptin, AP2S1, AP17, CLAPS2

Target/Specificity

This AP2S1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 36-64 amino acids from the Central region of human AP2S1.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

AP2S1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

AP2S1 Antibody (Center) - Protein Information

Name AP2S1 ([HGNC:565](#))

Synonyms AP17, CLAPS2

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. The AP-2 alpha and AP-2 sigma subunits are thought to contribute to the recognition of the [ED]-X-X-X-L-[LI] motif (By similarity). May also play a role in extracellular calcium homeostasis.

Cellular Location

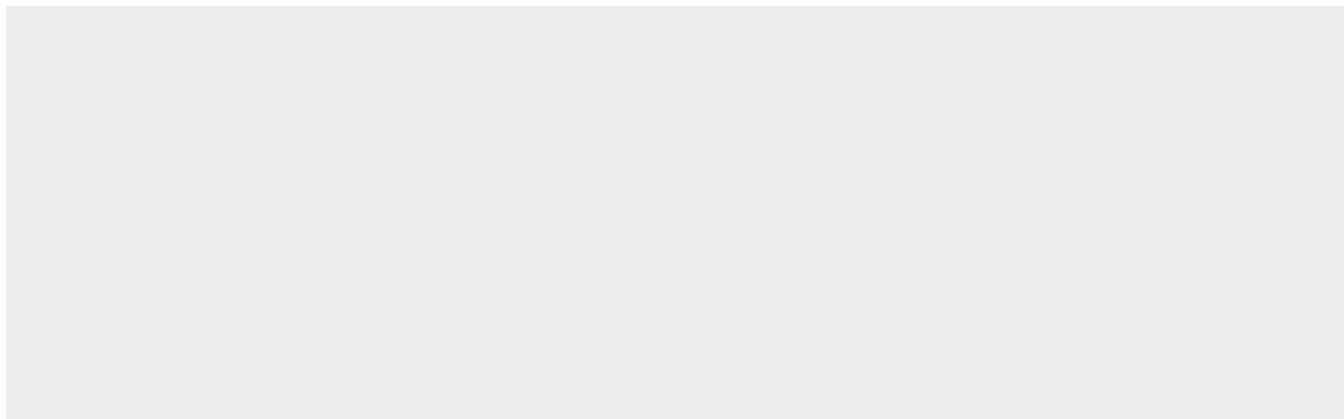
Cell membrane {ECO:0000250|UniProtKB:P63010}. Membrane, coated pit; Peripheral membrane protein; Cytoplasmic side. Note=AP-2 appears to be excluded from internalizing CCVs and to disengage from sites of endocytosis seconds before internalization of the nascent CCV {ECO:0000250|UniProtKB:P63010}

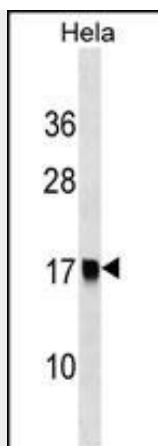
AP2S1 Antibody (Center) - Protocols

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](#)

AP2S1 Antibody (Center) - Images





AP2S1 Antibody (Center) (Cat. #AP17428c) western blot analysis in HeLa cell line lysates (35ug/lane). This demonstrates the AP2S1 antibody detected the AP2S1 protein (arrow).

AP2S1 Antibody (Center) - Background

One of two major clathrin-associated adaptor complexes, AP-2, is a heterotetramer which is associated with the plasma membrane. This complex is composed of two large chains, a medium chain, and a small chain. This gene encodes the small chain of this complex. Alternative splicing has been observed in this gene and results in two known transcripts.

AP2S1 Antibody (Center) - References

Stove, V., et al. J. Virol. 79(17):11422-11433(2005)
Lu, W., et al. Neuron 47(3):407-421(2005)
Collins, B.M., et al. Cell 109(4):523-535(2002)
Yano, H., et al. J. Neurosci. 21 (3), RC125 (2001) :
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