

**AP2S1 Antibody (Center) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP17428c****Specification**

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**AP2S1 Antibody (Center) Blocking Peptide - Product Information**Primary Accession [P53680](#)**AP2S1 Antibody (Center) Blocking Peptide - 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

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**AP2S1 Antibody (Center) Blocking Peptide - 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) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

### **AP2S1 Antibody (Center) Blocking Peptide - Images**

### **AP2S1 Antibody (Center) Blocking Peptide - Background**

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

### **AP2S1 Antibody (Center) Blocking Peptide - 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) :Pearse, B.M., et al. Curr. Opin. Struct. Biol. 10(2):220-228(2000)