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KD-Validated Anti-AP2S1 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1229

Product Information

Application	WB, FC, ICC
Primary Accession	P53680
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	23GB3660
Calculated MW	17018
Gene Name	AP2S1
Aliases	AP2S1; Adaptor Related Protein Complex 2 Subunit Sigma 1; CLAPS2; FBH3; Adaptor Related Protein Complex 2 Sigma 1 Subunit; Clathrin Assembly Protein 2 Sigma Small Chain; Plasma Membrane Adaptor AP-2 17 KDa Protein; Adaptor Protein Complex AP-2 Subunit Sigma; Clathrin Coat-Associated Protein AP17; Clathrin Coat Assembly Protein AP17; AP-2 Complex Subunit Sigma; HA2 17 KDa Subunit; Sigma2-Adaptin; Sigma-2; FBHOk; AP17; HHC3; Clathrin-Associated/Assembly/Adaptor Protein, Small 2 (17kD); Adaptor-Related Protein Complex 2 Subunit Sigma; Hypocalciuric Hypercalcemia 3 (Oklahoma Type) 2; FBHOK
Immunogen	A synthesized peptide derived from human AP2S1

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 (HGNC:565), AP17, CLAPS2

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}