

Rabbit AP2A2 Polyclonal Antibody | anti-AP2A2 antibody

AP2A2 Antibody

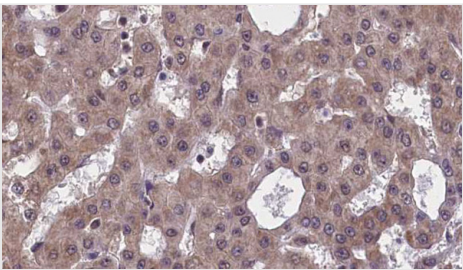
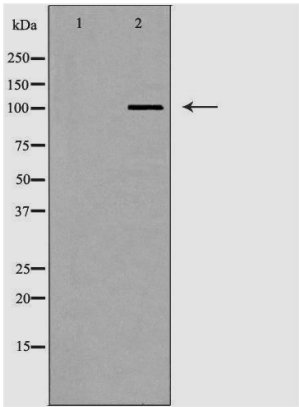
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA327020	Rabbit	Human, Mouse, Rat	ELISA, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

AP2A2; Polyclonal Antibody; AP2A2 Antibody; 100 kDa coated vesicle protein C; Adaptor protein complex AP-2 subunit alpha-2; Adaptor-related protein complex 2 subunit alpha-2; Alpha-adaptin C; Alpha2-adaptin; AP-2 complex subunit alpha-2; Ap2a2; AP2A2_HUMAN; Clathrin assembly protein complex 2 alpha-C large chain; HIP-9; Huntingtin yeast partner J; Huntingtin-interacting protein 9; Huntingtin-interacting protein J; Plasma membrane adaptor HA2/AP2 adaptin alpha C subunit; anti-AP2A2 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	AP2A2 antibody detects endogenous levels of total AP2A2
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	940
Applicable Applications for anti-AP2A2 antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human AP2A2
Subcellular Location	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.
Predicted Cross Reactivity	Bovine, Horse, Dog
Similarity	Bovine (92%), Horse (100%), Dog (92%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



IHC (Immunohistochemistry)
AAA327020 at 1/100 staining Human liver cancer tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

WB (Western Blot)
Western blot analysis of Mouse brain tissue lysate, using AP2A2 Antibody. The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-AP2A2 antibody

Description: Adaptins are components of the adaptor complexes which link clathrin to receptors in coated vesicles. Clathrin-associated protein complexes are believed to interact with the cytoplasmic tails of membrane proteins, leading to their selection and concentration. Alpha adaptin is a subunit of the plasma membrane adaptor. It binds polyphosphoinositides.

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 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-[LI] motif (By similarity).

Subunit Structure: Adaptor protein complex 2 (AP-2) is a heterotetramer composed of two large adaptins (alpha-type subunit AP2A1 or AP2A2 and beta-type subunit AP2B1), a medium adaptin (mu-type subunit AP2M1) and a small adaptin (sigma-type subunit AP2S1). Binds EPN1, EPS15, AMPH, SNAP91 and BIN1. Interacts with HIP1. Interacts with DGKD isoform 2 (By similarity). Interacts with DENND1A, DENND1B and DENND1C (By similarity). Interacts with FCHO1 and DAB2. Interacts with ATAT1; this interaction is required for efficient alpha-tubulin acetylation by ATAT1.

Similarity: Belongs to the adaptor complexes large subunit family.

NCBI AND UNIPROT INFORMATION

NCBI GI #	338827685
NCBI GeneID	161
NCBI Accession #	NP_001229766.1
NCBI GenBank Nucleotide #	NM_001242837.1
UniProt Accession #	O94973; O75403; Q53ET1; Q96SI8

Molecular Weight	Observed: 104 kDa Predicted: 104 kDa
NCBI Official Full Name	AP-2 complex subunit alpha-2 isoform 1
NCBI Official Synonym Full Names	adaptor related protein complex 2 subunit alpha 2
NCBI Official Symbol	AP2A2
NCBI Official Synonym Symbols	HIP9; HYPJ; ADTAB; HIP-9; CLAPA2
NCBI Protein Information	AP-2 complex subunit alpha-2
UniProt Protein Name	AP-2 complex subunit alpha-2
UniProt Gene Name	AP2A2
UniProt Synonym Gene Names	ADTAB; CLAPA2; HIP9; HYPJ; KIAA0899; HIP-9

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/polyclonal/ap2a2-antibody-immunohistochemistry-western-blot-elisa/327020>