

# Product datasheet

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# ARG66300 anti-alpha Adaptin antibody

Package: 50 μg Store at: -20°C

## **Summary**

Product Description Goat Polyclonal antibody recognizes alpha Adaptin

Tested Reactivity Hu, Ms

Predict Reactivity Cow, Rat, Pig

Tested Application WB

Host Goat

**Clonality** Polyclonal

Isotype IgG

Target Name alpha Adaptin

Species Human

Immunogen Synthetic peptide from the internal region of Human alpha Adaptin. (C-ELEPPAPESPMALLADPAPAAD)

Conjugation Un-conjugated

Alternate Names 100 kDa coated vesicle protein A; AP2-ALPHA; ADTAA; AP-2 complex subunit alpha-1; Adaptor-related

protein complex 2 subunit alpha-1; Clathrin assembly protein complex 2 alpha-A large chain; Alpha-adaptin A; Alpha1-adaptin; CLAPA1; Plasma membrane adaptor HA2/AP2 adaptin alpha A subunit;

Adaptor protein complex AP-2 subunit alpha-1

### **Application Instructions**

Application table	Application	Dilution
	WB	0.01 - 0.03 μg/ml
Application Note	WB: Recommend incubate at RT for 1h.  * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Observed Size ~ 110 kDa

### **Properties**

Form Liquid

Purification Affinity purified

Buffer Tris saline (pH 7.3), 0.02% Sodium azide and 0.5% BSA.

Preservative 0.02% Sodium azide

Stabilizer 0.5% BSA

Concentration 0.5 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated

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freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note

For laboratory research only, not for drug, diagnostic or other use.

#### Bioinformation

Gene Symbol

AP2A1

Gene Full Name

adaptor-related protein complex 2, alpha 1 subunit

Background

This gene encodes the alpha 1 adaptin subunit of the adaptor protein 2 (AP-2) complex found in clathrin coated vesicles. The AP-2 complex is a heterotetramer consisting of two large adaptins (alpha or beta), a medium adaptin (mu), and a small adaptin (sigma). The complex is part of the protein coat on the cytoplasmic face of coated vesicles which links clathrin to receptors in vesicles. Alternative splicing of this gene results in two transcript variants encoding two different isoforms. A third transcript variant has been described, but its full length nature has not been determined. [provided by RefSeq, Jul 2008]

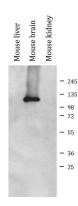
Function

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). [UniProt]

Calculated Mw

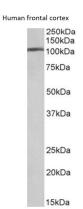
108 kDa

#### **Images**



#### ARG66300 anti-alpha Adaptin antibody WB image

Western blot: 5  $\mu$ g of Mouse liver, brain and kidney lysates (liver and kidney are negative controls). The blots were stained with ARG66300 anti-alpha Adaptin antibody at 0.1  $\mu$ g/ml dilution and incubated for 1 hour.



# ARG66300 anti-alpha Adaptin antibody WB image

Western blot: 35  $\mu g$  of Human frontal cortex lysate stained with ARG66300 anti-alpha Adaptin antibody at 0.01  $\mu g/ml$  and 1 hour incubation.