

## ARG57850 anti-alpha Adaptin antibody

Package: 100 µl  
Store at: -20°C

### Summary

Product Description	Rabbit Polyclonal antibody recognizes alpha Adaptin
Tested Reactivity	Hu, Ms, Rat
Tested Application	WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	alpha Adaptin
Species	Human
Immunogen	Recombinant protein of Human alpha Adaptin.
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	<table> <tr> <th>Application</th><th>Dilution</th></tr> <tr> <td>WB</td><td>1:500 - 1:2000</td></tr> </table>	Application	Dilution	WB	1:500 - 1:2000
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WB	1:500 - 1:2000				
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.				
Positive Control	THP-1				
Observed Size	~ 108 kDa				

### Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
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. Storage in frost free freezers is not recommended. Avoid repeated 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
Cellular Localization	Cell membrane, Membrane, coated pit, Peripheral membrane protein, Cytoplasmic side. [UniProt]

Images

