



Rabbit Anti-alpha Adaptin antibody

SL1228R

Product Name:	alpha Adaptin
Chinese Name:	衔接蛋白 α -Adaptin抗体
Alias:	100 kDa coated vesicle protein A; 100 kDa coated vesicle protein C; adaptin alpha A; Adaptin alpha B; Adaptor protein complex AP 2 alpha 1 subunit; Adaptor protein complex AP 2 alpha 2 subunit; Adaptor related protein complex 2 alpha 1 subunit; Adaptor related protein complex 2 alpha 2 subunit; ADTAA; ADTAB; Alpha adaptin A; Alpha adaptin C; AP 2 complex subunit alpha 1; AP 2 complex subunit alpha 2; AP2A2; CLAPA1; CLAPA2; Clathrin assembly protein complex 2 alpha A large chain; Clathrin assembly protein complex 2 alpha C large chain; Clathrin associated/assembly/adaptor protein large alpha 1; Clathrin associated/assembly/adaptor protein large alpha 2; HIP9; Huntingtin interacting protein HYPJ; Huntingtin interacting protein J; HYPJ; KIAA0899; Plasma membrane adaptor HA2/AP2 adaptin alpha A subunit; Plasma membrane adaptor HA2/AP2 adaptin alpha C subunit; AP2A2_HUMAN; AP-2 complex subunit alpha-2; Adapter-related protein complex 2 alpha-2 subunit; Adaptor protein complex AP-2 subunit alpha-2; Alpha-adaptin C; Alpha2-adaptin; Clathrin assembly protein complex 2 alpha-C large chain; Huntingtin yeast partner J; Huntingtin-interacting protein 9; HIP-9; Huntingtin-interacting protein J; Plasma membrane adaptor HA2/AP2 adaptin alpha C subunit.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Cow,Horse,Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	103kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human alpha Adaptin:21-150/939

Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	<p>Clathrin-mediated endocytosis is the pathway by which many receptors for nutrients and hormones are internalized to be recycled or down-regulated. During formation of clathrin coated membranes, clathrin co-assembles with heterotetrameric molecules known as assembly polypeptides (APs) or adaptors which form a layer of protein coat between the clathrin lattice and the membrane. There are two characterized adaptors AP1 and AP2. AP1 is associated with clathrin coated vesicles at the trans-Golgi network and AP2 is associated with the endocytic clathrin coated vesicles at the plasma membrane and has been shown to specifically interact with Shc and EGF receptor. AP2 is composed of four subunits, two separate 100 kDa gene products with similar domain structures (alpha and beta adaptin) and a 50 and 17 kDa subunit. There are two alpha-adaptin genes, alpha A and alpha C which have a tissue specific pattern of expression.</p> <p>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.</p> <p>Subunit: Adaptor protein complex 2 (AP-2) is a heterotetramer composed of two large adaptins</p>

(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. Interacts with DENND1A, DENND1B and DENND1C. Interacts with FCHO1 and DAB2.

Subcellular Location:

Cell membrane. 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.

Similarity:

Belongs to the adaptor complexes large subunit family.

SWISS:

O94973

Gene ID:

160

Database links:

[Entrez Gene: 515216](#)Cow

[Entrez Gene: 784636](#)Cow

[Entrez Gene: 160](#)Human

[Entrez Gene: 161](#)Human

[Entrez Gene: 11771](#)Mouse

[Entrez Gene: 11772](#)Mouse

[Entrez Gene: 308578](#)Rat

[Entrez Gene: 81637](#)Rat

[Omim: 601026](#)Human

[Omim: 607242](#)Human

[SwissProt: Q0VCK5](#)Cow

[SwissProt: O94973](#)Human

[SwissProt: O95782](#)Human

[SwissProt: P17426](#)Mouse

[SwissProt: P17427](#)Mouse

[SwissProt: P18484](#)Rat

[Unigene: 2041](#)Cow

[Unigene: 19121](#)Human

[Unigene: 6877](#)Mouse

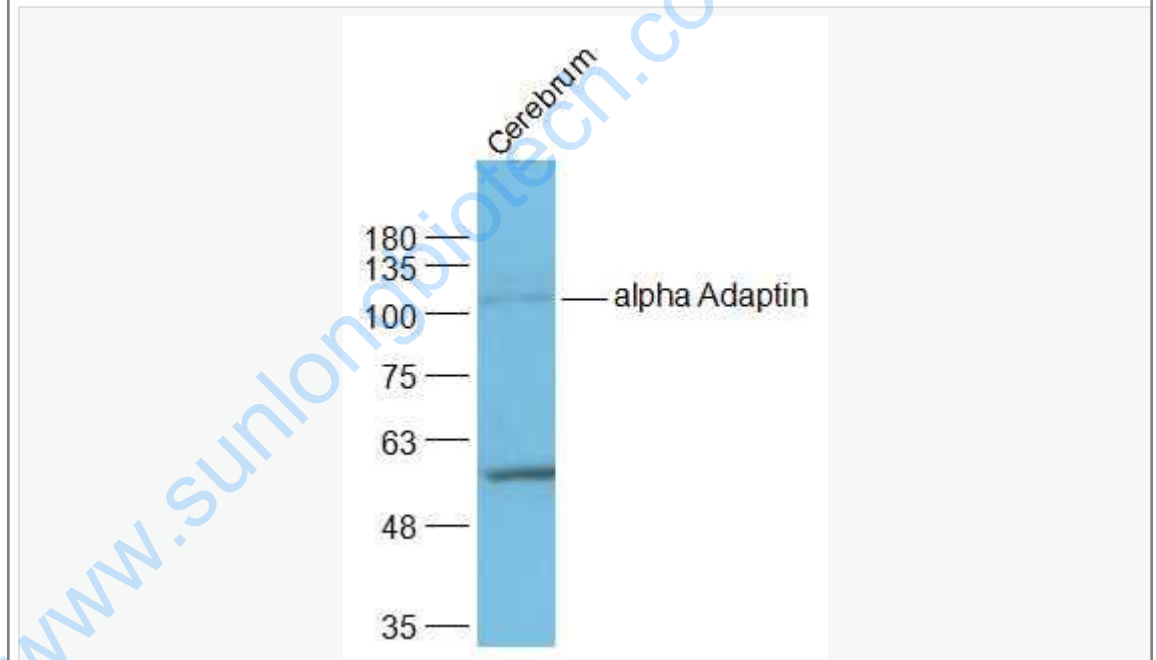
[Unigene: 34928](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

adaptin α 参与披网格蛋白小泡组装的一种蛋白质, 在披网格蛋白小泡组装中与受体的细胞质结构域相互作用, 起衔接作用.

Picture:



Sample:

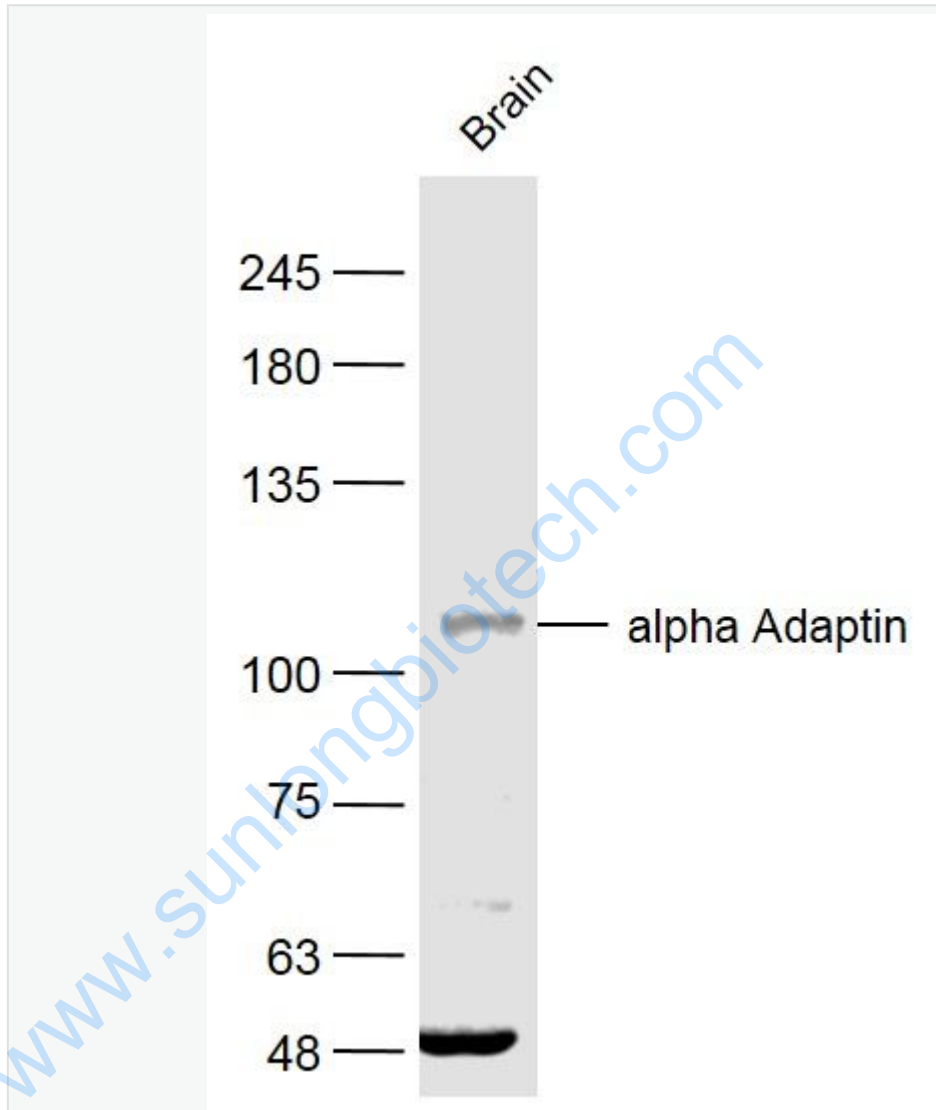
Cerebrum (Rat) Lysate at 40 ug

Primary: Anti-alpha Adaptin (SL1228R) at 1/2000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 103 kD

Observed band size: 103 kD



Sample:

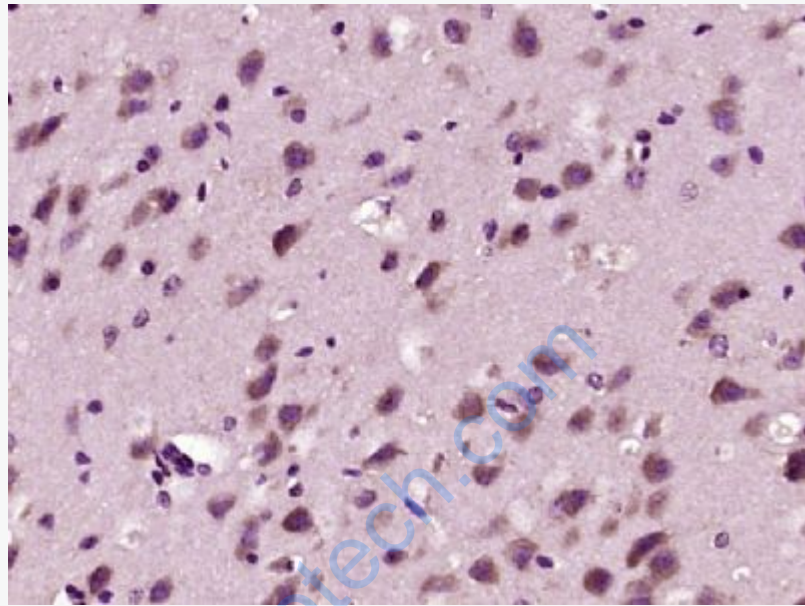
Brain (Mouse) Lysate at 40 ug

Primary: Anti-alpha Adaptin (SL1228R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 103 kD

Observed band size: 103 kD



Paraformaldehyde-fixed, paraffin embedded (mouse brain tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (alpha Adaptin) Polyclonal Antibody, Unconjugated (SL1228R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.