# abcam

# Product datasheet

# Anti-AP-2 complex subunit alpha-1 antibody ab3707

## 1 图像

概述

产品名称 Anti-AP-2 complex subunit alpha-1抗体

描述 山羊多克隆抗体to AP-2 complex subunit alpha-1

**宿主** Goat

特异性 The immunogen sequence is found in both AP2A2 and AP2A1. This antibody recognises a band

of just under 100kD in multiple human cell lines (see picture), the band can be blocked with the

immunising peptide.

经测试应用 适用于: WB

种属反应性 与反应: Human

预测可用于: Mouse

免疫原 Synthetic peptide corresponding to Human AP-2 complex subunit alpha-1 aa 3-14.

Sequence:

AVSKGDGMRGLAC

(Peptide available as ab11698)

Run BLAST with
Run BLAST with

常规说明

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

性能

形式 Liquid

存放说明 Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw

cycles.

存储溶液 Preservative: 0.01% Sodium azide

Constituents: 0.42% Potassium phosphate, 0.87% Sodium chloride

纯**度** Immunogen affinity purified

1

**克隆** 多克隆

**同种型** lgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab3707于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB		1/500. Detects a band of approximately 100 kDa (predicted molecular weight: 104, 108 kDa).

### 靶标

#### 功能

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 surrrounded 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-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 polyphosphoinositidecontaining lipids, positioning AP-2 on the membrane. The AP-2 alpha subunit acts via its Cterminal 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.

#### 组织特异性

Isoform A expressed in forebrain, skeletal muscle, spinal cord, cerebellum, salivary gland, heart and colon. Isoform B is widely expressed in tissues and also in breast cancer and in prostate carcinoma cells.

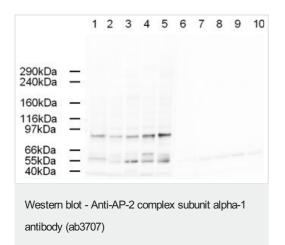
#### 序列相似性

Belongs to the adaptor complexes large subunit family.

# 细胞定位

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.

图片



Western blot using ab3707 at 1/500.

Lane 1: HeLa Nuclear Extract

Lane 2: HeLa Whole Cell Lysate

Lane 3: 293 Whole Cell Lysate

Lane 4: A431 Whole Cell Lysate

Lane 5: Jurkat Whole Cell Lysate

Lane 6: HeLa Nuclear Extract + blocking/immunising peptide

Lane 7: HeLa Whole Cell Lysate + blocking/immunising peptide

Lane 8: 293 Whole Cell Lysate + blocking/immunising peptide

Lane 9: A431 Whole Cell Lysate + blocking/immunising peptide

Lane 10: Jurkat Whole Cell Lysate + blocking/immunising peptide

AP2 alpha proteins (AP2A2 and AP2A1) have predicted molecular weights of 104 and 107kD. The band at just below 97kD (that is blocked by the immunising peptide) represents AP2 alpha, the lower bands are not blocked completely by the immunising peptide and are believed to be non-specific.

Secondary ab: Rabbit polyclonal to Goat IgG HRP

ab6741 (1/5000)

Exposure time: 1 minute.<

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