

AP-2 μ 1 (E-7): sc-515926

BACKGROUND

Adaptins are heterotetrameric subunits of adaptors, which are complexes involved in the formation of Clathrin-coated pits for vesicle-mediated endocytosis. Clathrin and its associated heterotetrameric protein complexes make up the main protein components of the coat surrounding the cytoplasmic face of coated vesicles. The Adaptin family, comprising α , β , β' and γ classes, is also responsible for the transport of ligand-receptor complexes from plasma membranes and the *trans*-Golgi network to lysosomes. Two main types of adaptor proteins (APs), AP-1 and AP-2, are found in Clathrin-coated structures located at the Golgi complex and the plasma membrane of mammalian cells, respectively. Adaptor protein complex 2 (AP-2) is composed of two large Adaptins (a1A/AP2A1 and b1/AP2B1), a medium Adaptin (m2/AP-2m1) and a small Adaptin (s2 long/AP2S1). AP-2m1, a 435 amino acid protein, links Clathrin to receptors in coated vesicles.

REFERENCES

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3. Shim, J., Sternberg, P.W. and Lee, J. 2000. Distinct and redundant functions of m1 medium chains of the AP-1 clathrin-associated protein complex in the nematode *Caenorhabditis elegans*. *Mol. Biol. Cell* 11: 2743-2756.
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CHROMOSOMAL LOCATION

Genetic locus: AP2M1 (human) mapping to 3q27.1; Ap2m1 (mouse) mapping to 16 A3.

SOURCE

AP-2 μ 1 (E-7) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 16-38 at the N-terminus of AP-2 μ 1 of human origin.

PRODUCT

Each vial contains 200 μ g IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

AP-2 μ 1 (E-7) is recommended for detection of AP-2 μ 1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for AP-2 μ 1 siRNA (h): sc-60184, AP-2 μ 1 siRNA (m): sc-60185, AP-2 μ 1 shRNA Plasmid (h): sc-60184-SH, AP-2 μ 1 shRNA Plasmid (m): sc-60185-SH, AP-2 μ 1 shRNA (h) Lentiviral Particles: sc-60184-V and AP-2 μ 1 shRNA (m) Lentiviral Particles: sc-60185-V.

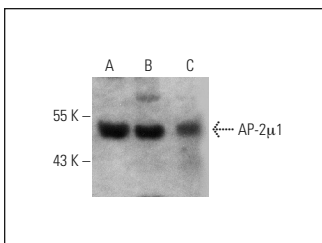
Molecular Weight of AP-2 μ 1: 50 kDa.

Positive Controls: HEK293 whole cell lysate: sc-45136, WI-38 whole cell lysate: sc-364260 or Hep G2 cell lysate: sc-2227.

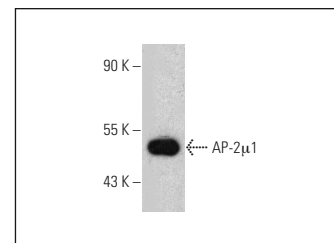
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



AP-2 μ 1 (E-7): sc-515926. Western blot analysis of AP-2 μ 1 expression in HEK293 (A), WI-38 (B) and Hep G2 (C) whole cell lysates.



AP-2 μ 1 (E-7): sc-515926. Western blot analysis of AP-2 μ 1 expression in C6 whole cell lysate.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.