

AP-3δ (18): sc-136277

BACKGROUND

Clathrin-coated pits and vesicles are assembled for receptor-mediated endocytosis through interaction with Clathrin-associated protein complexes. Vesicle transport is mediated from the *trans*-Golgi network by the adapter complex AP-1 and from the plasma membrane by the AP-2 complex. AP-3 (also designated AP180 or F1-20) is a synapse-specific Clathrin assembly protein. The protein CALM (Clathrin assembly protein lymphoid myeloid leukemia) is highly homologous to AP180 and may also be involved in Clathrin assembly. AP-3δ, AP-3α and AP-3μ are important parts of the AP-3 complex.

REFERENCES

1. Robinson, M.S. 1989. Cloning of cDNAs encoding two related 100 kDa coated vesicle proteins (α-adaptins). *J. Cell Biol.* 108: 833-842.
2. Kirchhausen, T., et al. 1989. Structural and functional division into two domains of the large (100 to 115 kDa) chains of the Clathrin-associated protein complex AP-2. *Proc. Natl. Acad. Sci. USA* 86: 2612-2616.
3. Robinson, M.S. 1990. Cloning and expression of γ-adaptin, a component of Clathrin-coated vesicles associated with the Golgi apparatus. *J. Cell Biol.* 111: 2319-2326.
4. Ponnambalam, S., et al. 1990. Conservation and diversity in families of coated vesicle adaptins. *J. Biol. Chem.* 265: 4814-4820.
5. Simpson, F., et al. 1997. Characterization of the adaptor-related protein complex, AP-3. *J. Cell Biol.* 137: 835-845.
6. Lefrançois, S., et al. 2004. An ear-core interaction regulates the recruitment of the AP-3 complex to membranes. *Dev. Cell* 7: 619-625.
7. Dong, X., et al. 2005. AP-3 directs the intracellular trafficking of HIV-1 Gag and plays a key role in particle assembly. *Cell* 120: 663-674.
8. Coleman, S.H., et al. 2005. Leucine-specific, functional interactions between human immunodeficiency virus type 1 Nef and adaptor protein complexes. *J. Virol.* 79: 2066-2078.
9. Lawton, A.P., et al. 2005. The mouse CD1d cytoplasmic tail mediates CD1d trafficking and antigen presentation by adaptor protein 3-dependent and independent mechanisms. *J. Immunol.* 174: 3179-3186.

CHROMOSOMAL LOCATION

Genetic locus: AP3D1 (human) mapping to 19p13.3.

SOURCE

AP-3δ (18) is a mouse monoclonal antibody raised against amino acids 627-731 of AP-3δ of human origin.

PRODUCT

Each vial contains 50 µg IgG₁ in 0.5 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

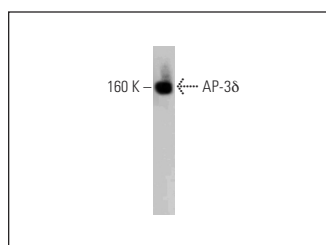
AP-3δ (18) is recommended for detection of AP-3δ of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for AP-3δ siRNA (h): sc-60176, AP-3δ shRNA Plasmid (h): sc-60176-SH and AP-3δ shRNA (h) Lentiviral Particles: sc-60176-V.

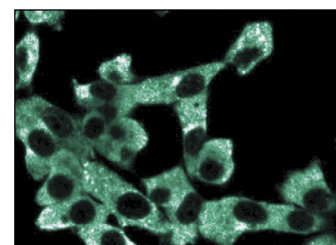
Molecular Weight of AP-3δ: 130 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, NIH/3T3 whole cell lysate: sc-2210 or IMR-32 cell lysate: sc-2409.

DATA



AP-3δ (18): sc-136277. Western blot analysis of AP-3δ expression in HeLa whole cell lysate.



AP-3δ (18): sc-136277. Immunofluorescence staining of E-S2 cells showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

1. Du, W., et al. 2021. Loss of optineurin drives cancer immune evasion via palmitoylation-dependent IFNGR1 lysosomal sorting and degradation. *Cancer Discov.* E-published.
2. Meng, D., et al. 2021. ArfGAP1 inhibits mTORC1 lysosomal localization and activation. *EMBO J.* E-published.

RESEARCH USE

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

PROTOCOLS

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