

AP-1 μ 1 (T-14): sc-109922

BACKGROUND

AP-1 μ 1 (adaptor-related protein complex 1, μ 1 subunit), also known as CLTNM, AP47, MU-1A or CLAPM2, is a 423 amino acid peripheral membrane protein that localizes to both the Golgi apparatus, as well as to the membrane of clathrin-coated vesicles. A member of the adaptor complex medium subunit family, AP-1 μ 1 is a subunit of the heterotetrameric adaptor-related protein complex 1 (AP-1), which plays a role in protein sorting in endosomes and in the trans-Golgi network. Specifically, the AP-1 complex mediates the recruitment of clathrin to membranes and also regulates the recognition of sorting signals within transmembrane cargo molecules. Containing one MHD (μ homology) domain and multiple phosphorylated amino acid residues, AP-1 μ 1 is encoded by a gene mapping to human chromosome 19p13.11 and mouse chromosome 8 B3.3.

REFERENCES

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- Korolchuk, V.I. and Banting, G. 2002. CK2 and GAK/auxilin2 are major protein kinases in clathrin-coated vesicles. *Traffic* 3: 428-439.
- Roeth, J.F., et al. 2004. HIV-1 Nef disrupts MHC-I trafficking by recruiting AP-1 to the MHC-I cytoplasmic tail. *J. Cell Biol.* 167: 903-913.
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CHROMOSOMAL LOCATION

Genetic locus: AP1M1 (human) mapping to 19p13.11; Ap1m1 (mouse) mapping to 8 B3.3.

SOURCE

AP-1 μ 1 (T-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of AP-1 μ 1 of human origin.

STORAGE

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

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-109922 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

AP-1 μ 1 (T-14) is recommended for detection of AP-1 μ 1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

AP-1 μ 1 (T-14) is also recommended for detection of AP-1 μ 1 in additional species, including equine, canine, bovine, porcine and avian.

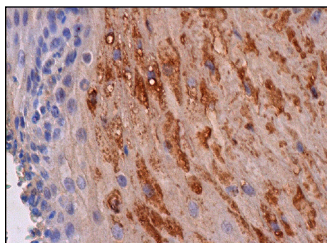
Suitable for use as control antibody for AP-1 μ 1 siRNA (h): sc-97430, AP-1 μ 1 siRNA (m): sc-141132, AP-1 μ 1 shRNA Plasmid (h): sc-97430-SH, AP-1 μ 1 shRNA Plasmid (m): sc-141132-SH, AP-1 μ 1 shRNA (h) Lentiviral Particles: sc-97430-V and AP-1 μ 1 shRNA (m) Lentiviral Particles: sc-141132-V.

Molecular Weight of AP-1 μ 1: 49 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



AP-1 μ 1 (T-14): sc-109922. Immunoperoxidase staining of formalin fixed, paraffin-embedded human esophagus tissue showing cytoplasmic staining of squamous epithelial cells.

RESEARCH USE

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