

AP3S1 Antibody

Catalog # ASC11342

Specification

AP3S1 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Application Notes WB, IHC-P, IF, E <u>O92572</u> <u>NP_001275</u>, <u>4502861</u> Human, Mouse, Rat Rabbit Polyclonal IgG AP3S1 antibody can be used for detection of AP3S1 by Western blot at 1 - 2 μg/mL. Antibody can also be used for immunohistochemistry starting at 2.5 μg/mL. For immunofluorescence start at 20 μg/mL.

AP3S1 Antibody - Additional Information

Gene ID

Target/Specificity

1176

AP3S1; At least three isoforms of AP3S1 are known to exist; this antibody will detect the two larger isoforms. AP3S1 antibody is predicted to not cross-react with other AP3 protein family members.

Reconstitution & Storage

AP3S1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions

AP3S1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

AP3S1 Antibody - Protein Information

Name AP3S1

Synonyms CLAPS3

Function

Part of the AP-3 complex, an adaptor-related complex which is not clathrin-associated. The complex is associated with the Golgi region as well as more peripheral structures. It facilitates the budding of vesicles from the Golgi membrane and may be directly involved in trafficking to lysosomes. In concert with the BLOC-1 complex, AP-3 is required to target cargos into vesicles assembled at cell bodies for delivery into neurites and nerve terminals.

Cellular Location



Golgi apparatus. Cytoplasmic vesicle membrane; Peripheral membrane protein; Cytoplasmic side. Note=Component of the coat surrounding the cytoplasmic face of coated vesicles located at the Golgi complex

Tissue Location Present in all adult tissues examined.

AP3S1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

AP3S1 Antibody - Images



Western blot analysis of AP3S1 in mouse kidney tissue lysate with AP3S1 antibody at (A) 1 and (B) 2 μ g/mL .





Immunohistochemistry of AP3S1 in human kidney tissue with AP3S1 antibody at 2.5 µg/mL.



Immunofluorescence of AP3S1 in human kidney tissue with AP3S1 antibody at 20 µg/mL.

AP3S1 Antibody - Background

AP3S1 Antibody: AP3S1 belongs to the adaptor complexes 3 (AP3) small subunit family which is not clathrin-associated. The complex is associated with the Golgi region as well as more peripheral structures. It facilitates the budding of vesicles from the Golgi membrane and may be directly involved in trafficking to lysosomes. AP3 is an heterotetramer composed of two large adaptins (AP3D1, AP3B1 or AP3B2), a medium adaptin (AP3M1 or AP3M2) and a small adaptin (APS1 or AP3S2). AP3S1 Interacts with AGAP1 and may play an important role in carcinoma.

AP3S1 Antibody - References

Watanabe TK, Shimizu F, Nagata M, et al. Cloning, expression pattern and mapping to 12p 13.2 --> p13.1 of CLAPS3, a gene encoding a novel clathrin-adaptor small chain. Cytogenet. Cell Genet. 1996; 73:214-7

Dell'Angelica EC, Ohno H, Ooi CE, et al. AP-3: an adaptor-like protein complex with ubiquitous expression. EMBO J. 1997; 16:917-28.

Zhou JB, Yang JK, Zhao L, et al. Variants in KCNQ1, AP3S1, MAN2A1, and ALDH7A1 and the risk of type 2 diabetes in the Chinese Northern Han population: a case-control study and meta-analysis. Med. Sci. Monit. 2010; 16:BR179-83.

Petrenko AA, Pavlova LS, Karseladze AI, et al. Downregulation of genes encoding for subunits of adaptor complex-3 in cervical carcinomas. Biochemistry 2006; 71:1153-60