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AP3S1 Antibody

Catalog # ASC11342

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q92572
Other Accession	NP_001275, 4502861
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	21732
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	AP3S1 antibody can be used for detection of AP3S1 by Western blot at 1 - 2 g/mL. Antibody can also be used for immunohistochemistry starting at 2.5 g/mL. For immunofluorescence start at 20 g/mL.

Additional Information

Gene ID	1176
Other Names	AP-3 complex subunit sigma-1, AP-3 complex subunit sigma-3A, Adaptor-related protein complex 3 subunit sigma-1, Clathrin-associated/assembly/adaptor protein, small 3, Sigma-3A-adaptin, Sigma3A-adaptin, Sigma-adaptin 3a, AP3S1, CLAPS3
Target/Specificity	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℃ for three months and -20℃, 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.

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.

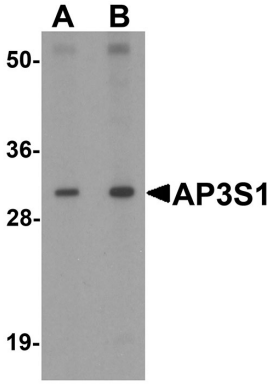
Background

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.

References

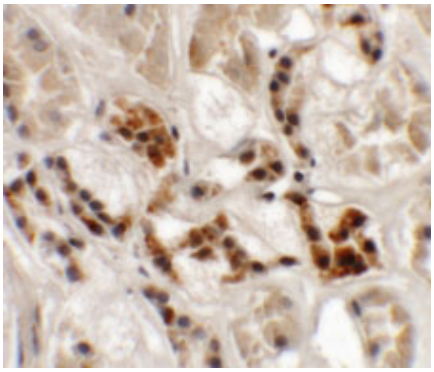
Watanabe TK, Shimizu F, Nagata M, et al. Cloning, expression pattern and mapping to 12p 13.2 --> p13.1 of CLAPS3, a gene encoding a novel clathrin-adaptor small chain. Cytogenet. Cell Genet. 1996; 73:214-7
Dell'Angelica EC, Ohno H, Ooi CE, et al. AP-3: an adaptor-like protein complex with ubiquitous 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

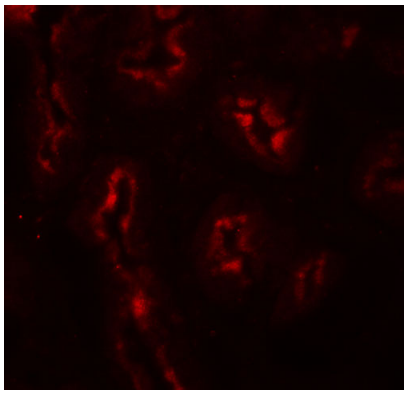
Images



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