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AP3B2 Antibody

Catalog # ASC11344

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q13367
Other Accession	NP_001265440, 34482047
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	119059
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	AP3B2 antibody can be used for detection of AP3B2 by Western blot at 1 - 2 g/mL. Antibody can also be used for immunohistochemistry starting at 5 g/mL. For immunofluorescence start at 20 g/mL.

Additional Information

Gene ID	8120
Other Names	AP-3 complex subunit beta-2, Adaptor protein complex AP-3 subunit beta-2, Adaptor-related protein complex 3 subunit beta-2, Beta-3B-adaptin, Clathrin assembly protein complex 3 beta-2 large chain, Neuron-specific vesicle coat protein beta-NAP, AP3B2
Target/Specificity	AP3B2;
Reconstitution & Storage	AP3B2 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	AP3B2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	AP3B2
Function	Subunit of non-clathrin- and clathrin-associated adaptor protein complex 3 (AP-3) that plays a role in protein sorting in the late-Golgi/trans-Golgi network (TGN) and/or endosomes. The AP complexes mediate both the recruitment of clathrin to membranes and the recognition of sorting signals within the cytosolic tails of transmembrane cargo molecules. AP-3 appears to be involved in the sorting of a subset of transmembrane proteins targeted to lysosomes and lysosome-related organelles. In concert with the BLOC-1

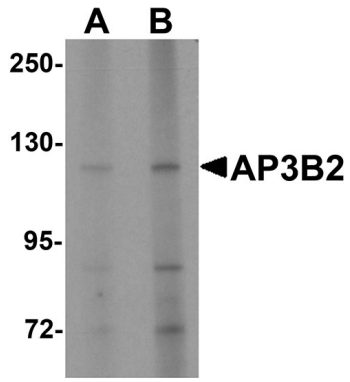
	complex, AP-3 is required to target cargos into vesicles assembled at cell bodies for delivery into neurites and nerve terminals.
Cellular Location	Cytoplasmic vesicle, clathrin-coated vesicle membrane; Peripheral membrane protein; Cytoplasmic side. Golgi apparatus Note=Component of the coat surrounding the cytoplasmic face of coated vesicles located at the Golgi complex.
Tissue Location	Isoform 1 expression is specific to nervous system. Expressed in nerve terminal and cell body, and is associated with nerve-terminal vesicles. Expression seen in Purkinje cells, cortical neurons, neuroectodermal tumors and graded in cerebral cortex (deeper layers exhibit stronger expression) (PubMed:1851215). Isoform 2 is expressed at high levels in brain and testis (PubMed:17453999)

Background

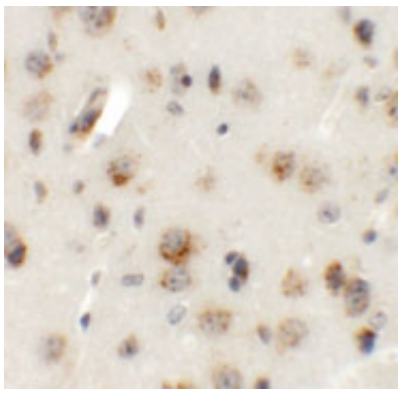
AP3B2 Antibody: The AP3 complex is a heterotetramer composed of two large adaptins (AP3D1, AP3B1 or AP3B2), a medium adaptin (AP3M1 or AP3M2) and a small adaptin (APS1 or AP3S2). The complex is associated with the Golgi region as well as more peripheral structures. It facilitates the budding of vesicles from the Golgi membrane and may be directly involved in trafficking to lysosomes. Unlike the homologous AP3B1, AP3B2-containing AP3 complexes are preferentially targeted to neuronal processes, and mice deficient in AP3B2 displayed compromised synaptic zinc stores.

References

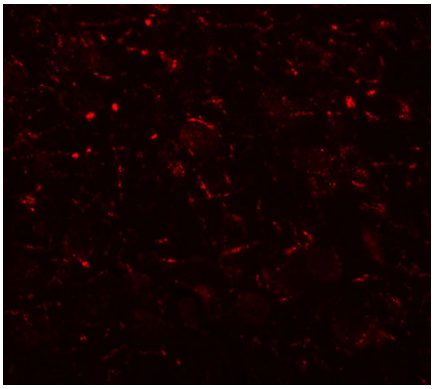
Images



Western blot analysis of AP3B2 in rat brain tissue lysate with AP3B2 antibody at (A) 1 and (B) 2 µg/mL.



Immunohistochemistry of AP3B2 in mouse brain tissue with AP3B2 antibody at 5 µg/mL.



Immunofluorescence of AP3B2 in mouse brain tissue with AP3B2 antibody at 20 µg/mL.