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AP3B2 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16877a

Product Information

Application	WB, E
Primary Accession	Q13367
Other Accession	Q9JME5, NP_004635.2
Reactivity	Human
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB30367
Calculated MW	119059
Antigen Region	16-44

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	This AP3B2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 16-44 amino acids from the N-terminal region of human AP3B2.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	AP3B2 Antibody (N-term) 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)

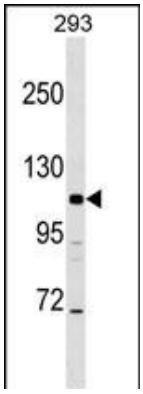
Background

Adaptor protein-3 (AP3) is a heterotetrameric vesicle-coat protein complex. Some AP3 subunits are ubiquitously expressed, whereas others are expressed exclusively in neurons. The neuron-specific AP3 complex, which includes AP3B2, is thought to serve neuron-specific functions such as neurotransmitter release (Grabner et al., 2006 [PubMed 16788073]).

References

Nicolas, E., et al. Eur. J. Hum. Genet. 18(10):1107-1113(2010)
Hashimoto, R., et al. Neurosci. Res. 65(1):113-115(2009)
Chen, C., et al. DNA Seq. 18(3):165-168(2007)
Grabner, C.P., et al. Proc. Natl. Acad. Sci. U.S.A. 103(26):10035-10040(2006)
Dubois, T., et al. Biochem. Biophys. Res. Commun. 301(2):502-508(2003)

Images



AP3B2 Antibody (N-term) (Cat. #AP16877a) western blot analysis in 293 cell line lysates (35ug/lane).This demonstrates the AP3B2 antibody detected the AP3B2 protein (arrow).