

FEZ1 Antibody

Catalog # ASC10553

Product Information

Application	WB, E
Primary Accession	Q99689
Other Accession	Q99689 , 13431526
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	45119
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	FEZ1 antibody can be used for the detection of FEZ1 by Western blot at 1 µg/mL. Despite its predicted molecular weight, FEZ1 will often run at higher molecular weight in SDS-PAGE.

Additional Information

Gene ID	9638
Other Names	Fasciculation and elongation protein zeta-1, Zygin I, Zygin-1, FEZ1
Target/Specificity	FEZ1;
Reconstitution & Storage	FEZ1 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	FEZ1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	FEZ1
Function	May be involved in axonal outgrowth as component of the network of molecules that regulate cellular morphology and axon guidance machinery. Able to restore partial locomotion and axonal fasciculation to C.elegans unc-76 mutants in germline transformation experiments. May participate in the transport of mitochondria and other cargos along microtubules.
Cellular Location	Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cell membrane. Note=Colocalizes with both, alpha- and gamma-tubulin Translocated from the plasma membrane to the cytoplasm by activation of the PKC zeta (By similarity).

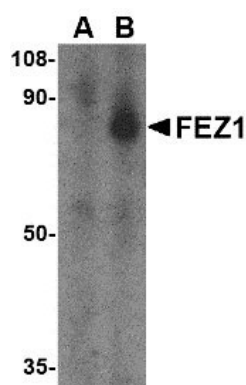
Background

FEZ1 Antibody: Similar to its *C. elegans* homolog UNC-76, mammalian FEZ1, an abundant membrane protein and protein kinase C (PKC)-Z substrate, is involved in axonal guidance. Following phosphorylation by PKC-Z, FEZ1 translocates from the plasma membrane to the cytoplasm. FEZ1 is then able to interact with a number of proteins involved in axonal outgrowth and cellular transport such as DISC1, a candidate gene for schizophrenia, as well as kinesin-1, a microtubule-based motor protein. FEZ1 also interacts with proteins involved in transcriptional regulation and chromatin remodeling, suggesting that FEZ1 may have nuclear regulatory functions in addition to those for neuronal development. At least two distinct isoforms of FEZ1 are known to exist.

References

Kuroda S, Nakagawa N, Tokunaga C, et al. Mammalian homologue of the *Caenorhabditis elegans* UNC-76 protein involved in axonal outgrowth is a protein kinase C ζ -interacting protein. *J. Cell Biol.* 1999; 144:403-11.
Bloom L and Horvitz HR. The *Caenorhabditis elegans* gene *unc-76* and its human homologs define a new gene family involved in axonal outgrowth and fasciculation. *Proc. Natl. Acad. Sci. USA* 1997; 88:9578-82.
Miyoshi K, Honda A, Baba K, et al. Disrupted-in-schizophrenia 1, a candidate gene for schizophrenia, participates in neurite outgrowth. *Mol. Psychiatry* 2003; 8:685-94.
Blasius TL, Cai D, Jih GT, et al. Two binding partners cooperate to activate the molecular motor kinesin-1. *J. Cell Biol.* 2007; 176:11-7.

Images



Western blot analysis of FEZ1 in SK-N-SH cell lysate with FEZ1 antibody at 1 μ g/mL in the (A) presence and (B) absence of blocking peptide.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.