

FEZ1 Antibody

Catalog # ASC10553

Specification

FEZ1 Antibody - Product Information

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality
Isotype

Application Notes

IF <u>099689</u> <u>099689</u>, <u>9638</u> Human, Mouse, Rat Rabbit

Polyclonal IgG

FEZ1 antibody can be used for the detection of FEZ1 by Western blot at 0.5 - 1 μg/mL. Despite its predicted molecular weight, FEZ1 will often run at higher molecular weight in SDS-PAGE.

FEZ1 Antibody - Additional Information

Gene ID **9638**

Target/Specificity

FEZ1 antibody was raised against a 19 amino acid synthetic peptide from near the carboxy terminus of human FEZ1.

The immunogen is located within amino acids 270 - 320 of 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.

FEZ1 Antibody - 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).



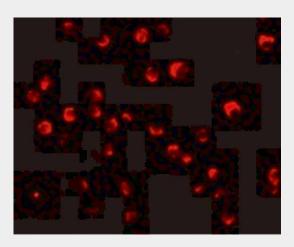
Tissue LocationMainly expressed in brain.

FEZ1 Antibody - Protocols

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

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

FEZ1 Antibody - Images



Immunofluorescence of Caspase-8 in Jurkat cells with Caspase-8 antibody at 20 μg/mL.

FEZ1 Antibody - 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.

FEZ1 Antibody - 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 z-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. USA1997; 88:9578-82.

Miyohi K, Honda A, Baba K, et al. Disrupted-in-schizophrenia 1, a candidate gene for schizophrenia,





participates in neurite outgrowth. Mol. Psychiatry2003; 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.