

Instruction Manual

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| Catalog Number | PK-AB718-4265 |
| Synonyms | FEZ1 Antibody: Fasciculation and elongation protein zeta 1, zygin 1 |
| Description | Similar to its <i>C. elegans</i> 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. Despite its predicted molecular weight, FEZ1 will often run at higher molecular weight in SDS-PAGE. |
| Quantity | 100 µg |
| Source / Host | Rabbit |
| Immunogen | FEZ1 antibody was raised in rabbits against a 19 amino acid peptide from near the carboxy terminus of human FEZ1. |
| Purification Method | Affinity chromatography purified via peptide column. |
| Clone / IgG Subtype | Polyclonal antibody |
| Species Reactivity | Human, Mouse, Rat |
| Specificity | |
| Formulation | Antibody is supplied in PBS containing 0.02% sodium azide. |
| Reconstitution | During shipment, small volumes of antibody will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 µl or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap. |
| Storage & Stability | Antibody can be stored at 4°C for three months and at -20°C 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. |
| Applications | E, WB INote: Antibody might be suitable for other applications not tested so far. Optimal concentrations for each application have to be determined individually. 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. |
| Images | Available upon request. |
| References | Kuroda S, Nakagawa N, Tokunaga C, et al. Mammalian homologue of the <i>Caenorhabditis elegans</i> UNC-76 protein involved in axonal outgrowth is a protein kinase C z-interacting protein. <i>J. Cell Biol.</i> 1999; 144:403-11. Bloom L and Horvitz HR. The <i>Caenorhabditis elegans</i> gene <i>unc-76</i> and its human homologs define a new gene family involved in axonal outgrowth and fasciculation. <i>Proc. Natl. Acad. Sci. USA</i> 1997; 88:9578-82. Miyohi K, Honda A, Baba K, et al. Disrupted-in-schizophrenia 1, a candidate gene for schizophrenia, participates in neurite outgrowth. <i>Mol. Psychiatry</i> 2003; 8:685-94. Blasius TL, Cai D, Jih GT, et al. Two binding partners cooperate to activate the molecular motor kinesin-1. <i>J. Cell Biol.</i> 2007; 176:11-7. |
| Images | Available upon request. |
| Related Products | Cat.No. PK-AB718-4265P; FEZ1 Peptide Cat.No. PK-AB718-1220; SK-N-SH Cell Lysate |

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