

# Goat Anti-FEZ1 / Zygin 1 Antibody

Peptide-affinity purified goat antibody Catalog # AF1409a

### **Specification**

# Goat Anti-FEZ1 / Zygin 1 Antibody - Product Information

Application WB, IHC Primary Accession 099689

Other Accession NP 005094, 9638, 235180 (mouse), 81730 (rat)

Reactivity Human

Predicted Mouse, Rat, Dog

Host Goat
Clonality Polyclonal
Concentration 100ug/200ul

Isotype IgG
Calculated MW 45119

# Goat Anti-FEZ1 / Zygin 1 Antibody - Additional Information

#### **Gene ID 9638**

#### **Other Names**

Fasciculation and elongation protein zeta-1, Zygin I, Zygin-1, FEZ1

#### **Format**

0.5 mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

### **Precautions**

Goat Anti-FEZ1 / Zygin 1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### Goat Anti-FEZ1 / Zygin 1 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).

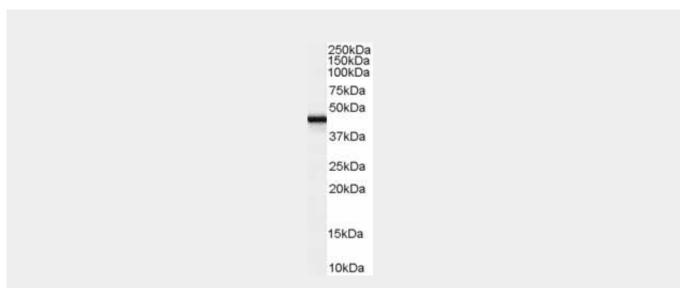
**Tissue Location**Mainly expressed in brain.

# Goat Anti-FEZ1 / Zygin 1 Antibody - Protocols

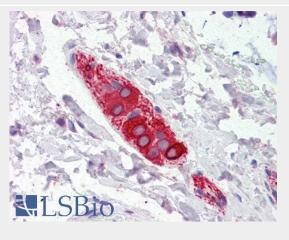
Provided below are standard protocols that you may find useful for product applications.

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

# Goat Anti-FEZ1 / Zygin 1 Antibody - Images

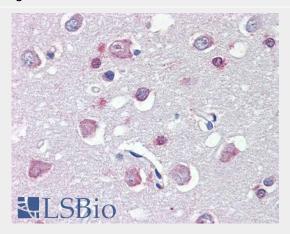


AF1409a (0.03  $\mu$ g/ml) staining of Human Brain (Frontal Cortex) lysate (35  $\mu$ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.





AF1409a (5 μg/ml) staining of paraffin embedded Human Colon. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.



AF1409a (5  $\mu$ g/ml) staining of paraffin embedded Human Cortex. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

# Goat Anti-FEZ1 / Zygin 1 Antibody - Background

This gene is an ortholog of the C. elegans unc-76 gene, which is necessary for normal axonal bundling and elongation within axon bundles. Expression of this gene in C. elegans unc-76 mutants can restore to the mutants partial locomotion and axonal fasciculation, suggesting that it also functions in axonal outgrowth. The N-terminal half of the gene product is highly acidic. Alternatively spliced transcript variants encoding different isoforms of this protein have been described.

# Goat Anti-FEZ1 / Zygin 1 Antibody - References

Evidence of statistical epistasis between DISC1, CIT and NDEL1 impacting risk for schizophrenia: biological validation with functional neuroimaging. Nicodemus KK, et al. Hum Genet, 2010 Jan 19. PMID 20084519.

The brain-specific factor FEZ1 is a determinant of neuronal susceptibility to HIV-1 infection. Haedicke J, et al. Proc Natl Acad Sci U S A, 2009 Aug 18. PMID 19667186.

Genetic association and post-mortem brain mRNA analysis of DISC1 and related genes in schizophrenia. Rastogi A, et al. Schizophr Res, 2009 Oct. PMID 19632097.

Identification of neuroglycan C and interacting partners as potential susceptibility genes for schizophrenia in a Southern Chinese population. So HC, et al. Am J Med Genet B Neuropsychiatr Genet, 2010 Jan 5. PMID 19367581.

Association between genes of Disrupted in schizophrenia 1 (DISC1) interactors and schizophrenia supports the role of the DISC1 pathway in the etiology of major mental illnesses. Tomppo L, et al. Biol Psychiatry, 2009 Jun 15. PMID 19251251.