

PJVK Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP18071c

Product Information

| | |
|--------------------------|--------------------------------|
| Application | WB, E |
| Primary Accession | Q0ZLH3 |
| Other Accession | NP_001036167.1 |
| Reactivity | Human |
| Host | Rabbit |
| Clonality | Polyclonal |
| Isotype | Rabbit IgG |
| Clone Names | RB37747 |
| Calculated MW | 39913 |
| Antigen Region | 170-197 |

Additional Information

| | |
|---------------------------|--|
| Gene ID | 494513 |
| Other Names | Pejvakin, Autosomal recessive deafness type 59 protein, DFNB59, PJVK |
| Target/Specificity | This PJVK antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 170-197 amino acids from the Central region of human PJVK. |
| 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 | PJVK Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures. |

Protein Information

| | |
|-----------------|--|
| Name | PJVK {ECO:0000303 PubMed:16804542, ECO:0000312 HGNC:HGNC:29502} |
| Function | Peroxisome-associated protein required to protect auditory hair cells against noise-induced damage. Acts by regulating noise- induced peroxisome proliferation in auditory hair cells and neurons, and promoting autophagic degradation of damaged peroxisomes (pexophagy). Noise overexposure |

increases reactive oxygen species (ROS) levels, causing oxidative damage to auditory hair cells and resulting in hearing loss. PJVK acts as a ROS sensor that recruits the autophagy machinery to trigger pexophagy of peroxisomes damaged by oxidative stress. In addition to pexophagy, also required to promote peroxisome proliferation in response to sound overstimulation.

Cellular Location

Peroxisome membrane {ECO:0000250 | UniProtKB:Q0ZLH2}. Cell projection, cilium {ECO:0000250 | UniProtKB:Q0ZLH2}. Note=Associates with the peroxisomal membrane; it is unclear whether it is embedded or just associated with the peroxisomal membrane. Localizes to ciliary rootlet {ECO:0000250 | UniProtKB:Q0ZLH2}

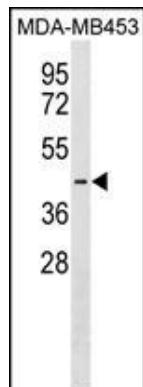
Background

The protein encoded by this gene is a member of the gasdermin family, a family which is found only in vertebrates. The encoded protein is required for the proper function of auditory pathway neurons. Defects in this gene are a cause of non-syndromic sensorineural deafness autosomal recessive type 59 (DFNB59).

References

Mahdieh, N., et al. J. Hum. Genet. 55(10):639-648(2010)
Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)
Hashemzadeh Chaleshtori, M., et al. Clin. Genet. 72(3):261-263(2007)
Collin, R.W., et al. Hum. Mutat. 28(7):718-723(2007)

Images



PJVK Antibody (Center) (Cat. #AP18071c) western blot analysis in MDA-MB453 cell line lysates (35ug/lane). This demonstrates the PJVK antibody detected the PJVK protein (arrow).

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