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Periaxin Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP54300

Specification

Periaxin Polyclonal Antibody - Product Information

Application	**WB, IHC-P, IHC-F, IF, ICC, E**
Primary Accession	O55103
Reactivity	**Rat, Pig, Dog**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**161 KDa**
Physical State	**Liquid**
Immunogen	**KLH conjugated synthetic peptide derived from mouse Periaxin**
Epitope Specificity	**1301-1391/1391**
Isotype	**IgG**
Purity	
affinity purified by Protein A	
Buffer	**0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.**
SUBCELLULAR LOCATION	**Nucleus.Isoform 1: Cell membrane. Isoform 2: Cytoplasm.**
SIMILARITY	**Belongs to the periaxin family. Contains 1 PDZ (DHR) domain.**
SUBUNIT	**Interacts with SCN10A. Found in a complex with SCN10A.**
DISEASE	**Defects in PRX are a cause of Dejerine-Sottas syndrome (DSS) [MIM:145900]; also known as Dejerine-Sottas neuropathy (DSN) or hereditary motor and sensory neuropathy III (HMSN3). DSS is a severe degenerating neuropathy of the demyelinating Charcot-Marie-Tooth disease category, with onset by age 2 years. DSS is characterized by motor and sensory neuropathy with very slow nerve conduction velocities, increased cerebrospinal fluid protein concentrations, hypertrophic nerve changes, delayed age of walking as well as areflexia. There are both autosomal dominant and autosomal recessive forms of Dejerine-Sottas syndrome.**
Important Note	**This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.**

Background Descriptions
This gene encodes a protein involved in peripheral nerve myelin upkeep. The encoded protein

contains 2 PDZ domains which were named after PSD95 (post synaptic density protein), DlgA (Drosophila disc large tumor suppressor), and ZO1 (a mammalian tight junction protein). Two alternatively spliced transcript variants have been described for this gene which encode different protein isoforms and which are targeted differently in the Schwann cell. Mutations in this gene cause Charcot-Marie-Tooth neuoropathy, type 4F and Dejerine-Sottas neuropathy. [provided by RefSeq, Jul 2008]

Periaxin Polyclonal Antibody - Additional Information

Gene ID 19153

Other Names
Periaxin, Prx

Target/Specificity
Isoform 1 and isoform 2 are found in sciatic nerve and Schwann cells.

Dilution
WB~~1:1000<br \>IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>ICC~~N/A<br \>E~~N/A

Storage
Store at -20 ℃ for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 ℃.

Periaxin Polyclonal Antibody - Protein Information

Name Prx

Function
Scaffolding protein that functions as part of a dystroglycan complex in Schwann cells, and as part of EZR and AHNAK-containing complexes in eye lens fiber cells (PubMed:11430802, PubMed:21745462, PubMed:22764250). Required for the maintenance of the peripheral myelin sheath that is essential for normal transmission of nerve impulses and normal perception of sensory stimuli (PubMed:10839370). Required for normal transport of MBP mRNA from the perinuclear to the paranodal regions (PubMed:15356632). Required for normal remyelination after nerve injury (PubMed:10839370). Required for normal elongation of Schwann cells and normal length of the internodes between the nodes of Ranvier. The demyelinated nodes of Ranvier permit saltatory transmission of nerve impulses; shorter internodes cause slower transmission of nerve impulses (PubMed:15356632, PubMed:23022068). Required for the formation of appositions between the abaxonal surface of the myelin sheath and the Schwann cell plasma membrane; the Schwann cell cytoplasm is restricted to regions between these appositions (PubMed:<a href="http://www.uniprot.org/citations/15356632"

target="_blank">15356632, PubMed:23022068). Required for the formation of Cajal bands and of Schmidt-Lanterman incisures that correspond to short, cytoplasm-filled regions on myelinated nerves (PubMed:22764250, PubMed:23022068). Recruits DRP2 to the Schwann cell plasma membrane (PubMed:11430802, PubMed:22764250, PubMed:23022068). Required for normal protein composition of the eye lens fiber cell plasma membrane and normal eye lens fiber cell morphology (PubMed:21745462).

Cellular Location
Cell membrane. Cell junction. Note=Colocalizes with ACTB at tricellular junctions between eye lens fiber cells [Isoform 2]: Cytoplasm

Tissue Location
Detected in myelinating Schwann cells in intramuscular nerves in triangularis sterni (PubMed:18205176). Detected in sciatic nerve (PubMed:11430802). Detected in eye lens fiber cells (PubMed:21745462). Isoform 1 is detected in myelinating Schwann cells in sciatic nerve (PubMed:10671475, PubMed:10839370, PubMed:9488714) Isoform 2 is detected in myelinating Schwann cells in sciatic nerve (at protein level) (PubMed:10839370, PubMed:9488714). Detected in sciatic nerve (PubMed:10839370, PubMed:9488714).

Periaxin Polyclonal Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Periaxin Polyclonal Antibody - Images