



Prickle Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP54850

Specification

Prickle Polyclonal Antibody - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW
Physical State
Immunogen

Epitope Specificity Isotype **Purity** affinity purified by Protein A

Buffer

SUBCELLULAR LOCATION SIMILARITY

SUBUNIT DISEASE

Important Note

IHC-P, IHC-F, IF, ICC, E

Q96MT3

Rat, Pig, Dog, Bovine

Rabbit Polyclonal 94 KDa Liquid

KLH conjugated synthetic peptide derived

from human Prickle

551-650/831

IaG

0.01M TBS (pH7.4) with 1% BSA, 0.02%

Proclin300 and 50% Glycerol.

Nuclear Membrane

Belongs to the prickle / espinas / testin family. Contains 3 LIM zinc-binding domains. Contains 1 PET domain.

Interacts with REST.

Defects in PRICKLE1 are the cause of progressive myoclonic epilepsy type 1B

(EPM1B) [MIM:612437]. EPM1B is an autosomal recessive disorder characterized by myoclonus that progresses in severity over time,

tonic-clonic seizures and ataxia. Defects in PRICKLE1 may be a cause of susceptibility

to neural tube defects (NTD)

[MIM:182940]. Congenital malformations of the central nervous system and adjacent structures related to defective neural tube

closure during the first trimester of pregnancy. Failure of neural tube closure can occur at any level of the embryonic

axis. Common NTD forms include anencephaly, myelomeningocele and spina bifida, which result from the failure of fusion in the cranial and spinal region of the neural tube. NTDs have a multifactorial

environmental components.

This product as supplied is intended for research use only, not for use in human,

etiology encompassing both genetic and



therapeutic or diagnostic applications.

Background Descriptions

Prickle1 is an 831 amino acid protein that contains one PET domain and three LIM zinc-binding domains and localizes to the cytoplasm, as well as to the nuclear membrane. Expressed at higher levels in placenta and at lower levels in liver, brain, kidney, lung and pancreas, Prickle1 is thought to function as a nuclear receptor that interacts with NRSF, a silencer protein that binds the DNA sequence element NRSE (neuron-restrictive silencer element). Defects in the gene encoding Prickle1 are associated with autosomal recessive progressive myoclonic epilepsy-1B, which is characterized by quick jerks of the arms, shoulders or legs. The gene encoding Prickle1 maps to human chromosome 12, which encodes over 1,100 genes and comprises approximately 4.5% of the human genome.

Prickle Polyclonal Antibody - Additional Information

Gene ID 144165

Other Names

Prickle-like protein 1, REST/NRSF-interacting LIM domain protein 1, PRICKLE1, RILP

Target/Specificity

Expressed at highest levels in placenta and at lower levels in lung, liver, kidney and pancreas. Expressed in thalamus, hippocampus, cerebral cortex, and cerebellum (in neurons rather than glia).

Dilution

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<span class ="dilution_IHC-P">IHC-P~~N/A</span><br \> <span class
="dilution_IHC-F">IHC-F~~N/A</span><br \> <span class
="dilution_IF">IF~~1:50~200</span><br \> <span class = "dilution_ICC">ICC~~N/A</span><br \> <span class = "dilution_E">E~~N/A</span>
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Storage

Store at -20 $^{\circ}$ C 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 $^{\circ}$ C.

Prickle Polyclonal Antibody - Protein Information

Name PRICKLE1

Synonyms RILP

Function

Involved in the planar cell polarity pathway that controls convergent extension during gastrulation and neural tube closure. Convergent extension is a complex morphogenetic process during which cells elongate, move mediolaterally, and intercalate between neighboring cells, leading to convergence toward the mediolateral axis and extension along the anteroposterior axis. Necessary for nuclear localization of REST. May serve as nuclear receptor.

Cellular Location

Nucleus membrane. Cytoplasm, cytosol. Note=A smaller amount is detected in the cytosol

Tissue Location

Expressed at highest levels in placenta and at lower levels in lung, liver, kidney and pancreas. Expressed in thalamus, hippocampus, cerebral cortex, and cerebellum (in neurons rather than



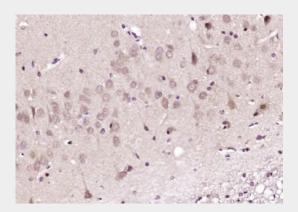
glia).

Prickle Polyclonal Antibody - Protocols

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

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

Prickle Polyclonal Antibody - Images



Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Prickle) Polyclonal Antibody, Unconjugated (bs-12411R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.