

Prickle Rabbit pAb

Prickle Rabbit pAb Catalog # AP54850

#### **Product Information**

**Application** IHC-P, IHC-F, IF

**Primary Accession** Q14C83 Reactivity Rat

**Predicted** Human, Mouse, Dog, Pig, Horse, Sheep

Host Rabbit Clonality Polyclonal **Calculated MW** 94 KDa **Physical State** Liquid

**Immunogen** KLH conjugated synthetic peptide derived from human Prickle

**Epitope Specificity** 551-650/831

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 Nuclear Membrane

**SIMILARITY** Belongs to the prickle / espinas / testin family. Contains 3 LIM zinc-binding

domains. Contains 1 PET domain.

**SUBUNIT** Interacts with REST.

**DISEASE** 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 etiology encompassing both genetic and environmental

components.

This product as supplied is intended for research use only, not for use in **Important Note** 

human, therapeutic or diagnostic applications.

Prickle1 is an 831 amino acid protein that contains one PET domain and three **Background Descriptions** 

> 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.

### **Additional Information**

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** IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500

**Storage** Store at -20 °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

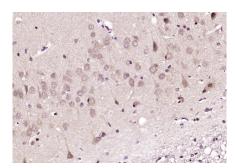
is stable for at least two weeks at 2-4 °C.

## **Protein Information**

# **Background**

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.

## **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 (AP54850) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

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