

PRICKLE1 Antibody

Catalog # ASC11399

Product Information

Application	WB, IF, E
Primary Accession	Q96MT3
Other Accession	NP_694571 , 222136684
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	94300
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	PRICKLE1 antibody can be used for detection of PRICKLE1 by Western blot at 1 µg/mL. Antibody can also be used for immunofluorescence starting at 20 µg/mL. For immunofluorescence start at 20 µg/mL.

Additional Information

Gene ID	144165
Other Names	Prickle-like protein 1, REST/NRSF-interacting LIM domain protein 1, PRICKLE1, RILP
Target/Specificity	PRICKLE1; Multiple isoforms of PRICKLE1 are known to exist. PRICKLE1 antibody is predicted to not cross-react with other PRICKLE protein family members.
Reconstitution & Storage	PRICKLE1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	PRICKLE1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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).

Background

PRICKLE1 Antibody: PRICKLE1, also known as RILP or EPM1B, is a Disheveled-associated protein that serves as a nuclear translocation receptor for REST/NRSF and REST4 (1, 2). It contains three N-terminal LIM domains and three C-terminal nuclear localization signals. It localizes to the cytoplasm, as well as to the nuclear membrane and expressed at higher levels in placenta. PRICKLE1 is a negative regulator of the Wnt / beta-catenin signaling pathway and is a putative tumor suppressor in human HCCs. Defects in the gene encoding PRICKLE1 are associated with autosomal recessive progressive myoclonic epilepsy.

References

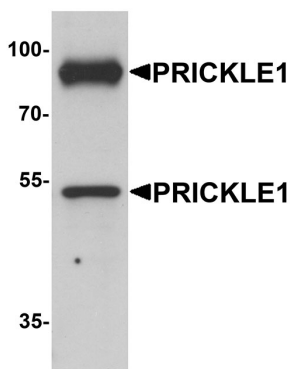
Katoh M and Katoh M. Identification and characterization of human PRICKLE1 and PRICKLE2 genes as well as mouse Prickle1 and Prickle2 genes homologous to Drosophila tissue polarity gene prickle. *Int. J. Mol. Med.* 2003; 11:249-56

Shimojo M and Hersh LB. REST/NRSF-interacting LIM domain protein, a putative nuclear translocation receptor. *Mol. Cell. Biol.* 2003; 23:9025-31

Chan DW, Chan CY, Yam JW, et al. Prickle1 negatively regulates Wnt/ β -catenin pathway by promoting Disheveled ubiquitination/degradation in liver cancer. *Gastroenterology* 2006; 131:1218-27.

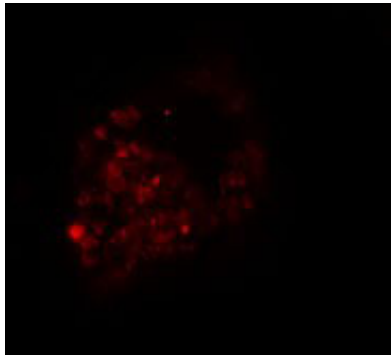
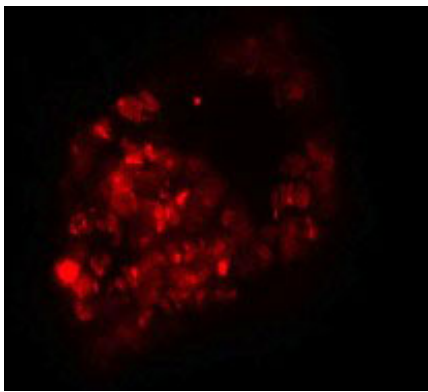
Tao H, Manak JR, Sowers L, et al. Mutations in prickle orthologs cause seizures in flies, mice, and humans. *Am. J. Hum. Genet.* 2011; 88:138-49.

Images



Western blot analysis of PRICKLE1 in human bladder tissue lysate with PRICKLE1 antibody at 1 μ g/mL.

Immunofluorescence of PRICKLE1 in human bladder cells with PRICKLE1 antibody at 20 μ g/mL.



Immunofluorescence of PRICKLE1 in Human Bladder tissue with PRICKLE1 antibody at 20 $\mu\text{g/mL}$.

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