

Prickle1 (F-5): sc-393034

BACKGROUND

Prickle1, also known as RILP or EPM1B, 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.

CHROMOSOMAL LOCATION

Genetic locus: PRICKLE1 (human) mapping to 12q12; Prickle1 (mouse) mapping to 15 E3.

SOURCE

Prickle1 (F-5) is a mouse monoclonal antibody raised against amino acids 685-766 mapping near the C-terminus of Prickle1 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Prickle1 (F-5) is available conjugated to agarose (sc-393034 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393034 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393034 PE), fluorescein (sc-393034 FITC), Alexa Fluor® 488 (sc-393034 AF488), Alexa Fluor® 546 (sc-393034 AF546), Alexa Fluor® 594 (sc-393034 AF594) or Alexa Fluor® 647 (sc-393034 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393034 AF680) or Alexa Fluor® 790 (sc-393034 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

Prickle1 (F-5) is recommended for detection of Prickle1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Prickle1 siRNA (h): sc-76247, Prickle1 siRNA (m): sc-76248, Prickle1 shRNA Plasmid (h): sc-76247-SH, Prickle1 shRNA Plasmid (m): sc-76248-SH, Prickle1 shRNA (h) Lentiviral Particles: sc-76247-V and Prickle1 shRNA (m) Lentiviral Particles: sc-76248-V.

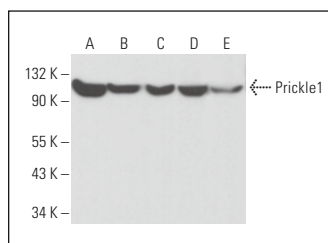
Molecular Weight of Prickle1: 100 kDa.

Positive Controls: MDA-MB-231 cell lysate: sc-2232, NIH/3T3 whole cell lysate: sc-2210 or PC-12 cell lysate: sc-2250.

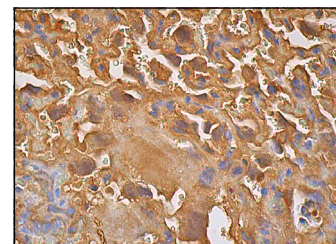
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



Prickle1 (F-5): sc-393034. Western blot analysis of Prickle1 expression in MDA-MB-231 (A), BT-20 (B), 3611-RF (C), PC-12 (D) and NIH/3T3 (E) whole cell lysates.



Prickle1 (F-5): sc-393034. Immunoperoxidase staining of formalin fixed, paraffin-embedded mouse placenta tissue showing nuclear and cytoplasmic staining of trophoblastic cells and decidual cells.

SELECT PRODUCT CITATIONS

- Zhou, R., et al. 2021. Prickle1 promotes gastric cancer metastasis by activating mTOR signaling. *Am. J. Transl. Res.* 13: 4266-4280.
- Liu, D., et al. 2021. Prickle1 × FOCAD interaction revealed by genome-wide vQTL analysis of human facial traits. *Front. Genet.* 12: 674642.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.