

Prickle2 (K-19): sc-69231

BACKGROUND

Prickle2 is an 844 amino acid protein that localizes to the nuclear membrane and contains one PET domain and 3 LIM zinc-binding domains. Expressed in testis, brain and eye tissue, as well as in gastric and uterine tumors, Prickle2 may be involved in neurite formation during brain growth and may also be associated with tumor formation and metastasis. The gene encoding Prickle2 maps to human chromosome 3, which houses over 1,100 genes, including a chemokine receptor (CKR) gene cluster and a variety of human cancer-related gene loci. Key tumor suppressing genes on chromosome 3 include those that encode the apoptosis mediator RASSF1, the cell migration regulator HYAL1 and the angiogenesis suppressor SEMA3B. Marfan syndrome, porphyria, von Hippel-Lindau syndrome, osteogenesis imperfecta and Charcot-Marie-Tooth disease are a few of the numerous genetic diseases associated with chromosome 3.

REFERENCES

1. Katoh, M. and Katoh, M. 2003. 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.* 11: 249-256.
2. Braga, E.A., Kashuba, V.I., Maliukova, A.V., Loginov, V.I., Senchenko, V.N., Bazov, I.V., Kiselev, L.L. and Zabarovskii, E.R. 2003. New tumor suppressor genes in hot spots of human chromosome 3: new methods of identification. *Mol. Biol.* 37: 194-211.
3. Tsend-Ayush, E., Grütznér, F., Yue, Y., Grossmann, B., Hänsel, U., Sudbrak, R. and Haaf, T. 2004. Plasticity of human chromosome 3 during primate evolution. *Genomics* 83: 193-202.
4. Online Mendelian Inheritance in Man, OMIM[™]. 2004. Johns Hopkins University, Baltimore, MD. MIM Number: 608501. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: PRICKLE2 (human) mapping to 3p14.1; Prickle2 (mouse) mapping to 6 D1.

SOURCE

Prickle2 (K-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Prickle2 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-69231 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

Prickle2 (K-19) is recommended for detection of Prickle2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Prickle2 (K-19) is also recommended for detection of Prickle2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Prickle2 siRNA (h): sc-76249, Prickle2 siRNA (m): sc-76250, Prickle2 shRNA Plasmid (h): sc-76249-SH, Prickle2 shRNA Plasmid (m): sc-76250-SH, Prickle2 shRNA (h) Lentiviral Particles: sc-76249-V and Prickle2 shRNA (m) Lentiviral Particles: sc-76250-V.

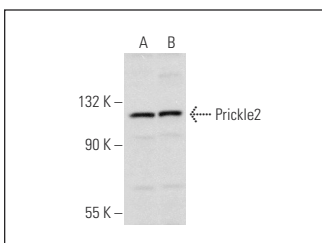
Molecular Weight of Prickle2: 96 kDa.

Positive Controls: K-562 nuclear extract: sc-2130 or HeLa nuclear extract: sc-2120.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker[™] Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

DATA



Prickle2 (K-19): sc-69231. Western blot analysis of Prickle2 expression in HeLa (A) and K-562 (B) nuclear extracts.

RESEARCH USE

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

PROTOCOLS

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