SANTA CRUZ BIOTECHNOLOGY, INC.

KANK1 (177D2T): sc-517629

BACKGROUND

KANK1 (KN motif and ankyrin repeat domains 1), also known as ANKRD15, is a 1,352 amino acid protein containing five ANK domains. KANK1 interacts with 14-3-3, regulated by Insulin and EGF and mediated through phosphorylation of Kank by Akt, which inhibits insultin-induced cell migration as well as Insulin and active Akt-dependent activation of RhoA. KANK1 also negatively regulates the formation of actin stress fibbers through inhibition of RhoA activity. KANK1 also interacts with IRSp53, inhibiting the binding of IRSp53 with active Rac1 which in turn inhibits the development of lamellipodia but not filopodia. KANK1 also regulates cell polarity during directed migration in wound healing. KANK1 is also thought to inhibit fibronectin-mediated cell spreading and neurite outgrowth. Mutations in the KANK1 gene results in CPSQ2 (cerebral palsy, spastic quadriplegic 2), a non-progressive disorder of movement and/or posture resulting from defects in the developing nervous system.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: KANK1 (human) mapping to 9p24.3.

SOURCE

KANK1 (177D2T) is a mouse monoclonal antibody raised against recombinant KANK1 of human origin.

PRODUCT

Each vial contains 100 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

KANK1 (177D2T) is recommended for detection of KANK1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for KANK1 siRNA (h): sc-92843, KANK1 siRNA (m): sc-141079, KANK1 shRNA Plasmid (h): sc-92843-SH, KANK1 shRNA Plasmid (m): sc-141079-SH, KANK1 shRNA (h) Lentiviral Particles: sc-92843-V and KANK1 shRNA (m) Lentiviral Particles: sc-141079-V.

Molecular Weight of KANK1: 130 kDa.

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) 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. 3) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

SELECT PRODUCT CITATIONS

1. Lv, M., Xu, Y., Chen, P., Li, J., Qin, Z., Huang, B., Liu, Y., Tao, X., Xiang, J., Wang, Y., Feng, Y., Zheng, W., Zhang, Z., Li, L. and Liao, H. 2024. TSLP enhances progestin response in endometrial cancer via androgen receptor signal pathway. Br. J. Cancer 130: 585-596.

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.