SANTA CRUZ BIOTECHNOLOGY, INC.

CNK2 (Q-13): sc-167511



The Power to Question

BACKGROUND

CNK2 (connector enhancer of kinase suppressor of Ras 2), also known as KSR2 or CNKSR2, is a 1,034 amino acid cytoplasmic and peripheral membrane protein involved in the RAS-dependent signaling pathway. RAS is essential for integrating and transmitting proliferation, differentiation and survival signals elicited by membrane receptors to downstream effector pathways. RAF is part of the RAS-dependent signaling pathway and is involved in the transduction of mitogenic signals from the cell membrane to the nucleus. A member of the CNKSR family, CNK2 contains one CRIC domain, a SAM (sterile α motif) domain, one PH domain, a PZD domain and a single DUF1170 domain. CNK2 exists as two alternatively spliced isoforms that undergo post-translational phosphorylation.

REFERENCES

- 1. Ishikawa, F., et al. 1987. Rat c-raf oncogene activation by a rearrangement that produces a fused protein. Mol. Cell. Biol. 7: 1226-1232.
- 2. Katz, M.E. and McCormick, F. 1997. Signal transduction from multiple Ras effectors. Curr. Opin. Genet. Dev. 7: 75-79.
- Nagase, T., et al. 1998. Prediction of the coding sequences of unidentified human genes. XII. The complete sequences of 100 new cDNA clones from brain which code for large proteins *in vitro*. DNA Res. 5: 355-364.
- 4. Bos, J.L. 1998. All in the family? New insights and questions regarding interconnectivity of Ras, Rap1 and Ral. EMBO J. 17: 6776-6782.
- Lanigan, T.M., et al. 2003. Human homologue of *Drosophila* CNK interacts with Ras effector proteins Raf and Rlf. FASEB J. 17: 2048-2060.
- 6. Sjöblom, T., et al. 2006. The consensus coding sequences of human breast and colorectal cancers. Science 314: 268-274.
- Rajakulendran, T., Sahmi, M., Kurinov, I., Tyers, M., Therrien, M. and Sicheri, F. 2008. CNK and HYP form a discrete dimer by their SAM domains to mediate RAF kinase signaling. Proc. Natl. Acad. Sci. USA 105: 2836-2841.
- 8. Online Mendelian Inheritance in Man, OMIM™. 2008. Johns Hopkins University, Baltimore, MD. MIM Number: 300724. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/

CHROMOSOMAL LOCATION

Genetic locus: CNKSR2 (human) mapping to Xp22.12; Cnksr2 (mouse) mapping to X F4.

SOURCE

CNK2 (Q-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CNK2 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-167511 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CNK2 (Q-13) is recommended for detection of CNK2 of mouse, rat and 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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with CNK1.

Suitable for use as control antibody for CNK2 siRNA (h): sc-91273, CNK2 siRNA (m): sc-142434, CNK2 shRNA Plasmid (h): sc-91273-SH, CNK2 shRNA Plasmid (m): sc-142434-SH, CNK2 shRNA (h) Lentiviral Particles: sc-91273-V and CNK2 shRNA (m) Lentiviral Particles: sc-142434-V.

Molecular Weight of CNK2: 118 kDa.

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) Immunofluo-rescence: 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.

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 or our catalog for detailed protocols and support products.