SANTA CRUZ BIOTECHNOLOGY, INC.

NRK1 (E-13): sc-161136

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Nicotinamide adenine dinucleotide (NAD^+) is an essential cofactor involved in fundamental processes in cell metabolism. NRK1 (nicotinamide riboside kinase 1), also known as Ribosylnicotinamide kinase 1, is a 199 amino acid enzyme is involved in the synthesis of NAD^+ through nicotinamide mononucleotide using nicotinamide riboside as the precursor. Nicotinamide riboside has been idenitifed as a nutrient in milk, suggesting that it is a useful compound for elevating the NAD^+ levels in humans. NRK1 also phosphorylates the anti-cancer drugs tiazofurin and 3-deazaguanosine, which converts them into toxic NAD^+ analogs and leads to the inhibition of guanine nucleotide biosynthesis. There are two isoforms of NRK1 that are produced as a result of alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: NMRK1 (human) mapping to 9q21.13; Nmrk1 (mouse) mapping to 19 B.

SOURCE

NRK1 (E-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of NRK1 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-161136 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

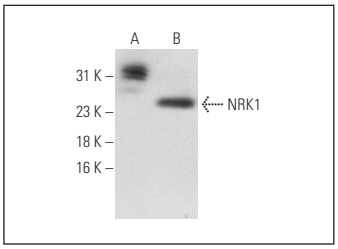
NRK1 (E-13) is recommended for detection of NRK1 of human and, to a lesser extent, mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with NRK.

NRK1 (E-13) is also recommended for detection of NRK1 in additional species, including porcine.

Suitable for use as control antibody for NRK1 siRNA (h): sc-92471, NRK1 siRNA (m): sc-150069, NRK1 shRNA Plasmid (h): sc-92471-SH, NRK1 shRNA Plasmid (m): sc-150069-SH, NRK1 shRNA (h) Lentiviral Particles: sc-92471-V and NRK1 shRNA (m) Lentiviral Particles: sc-150069-V.

Molecular Weight of NRK1: 23 kDa.

DATA



NRK1 (E-13): sc-161136. Western blot analysis of NRK1 expression in non-transfected: sc-117752 (**A**) and mouse NRK1 transfected: sc-122131 (**B**) 293T whole cell lysates.

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.