SANTA CRUZ BIOTECHNOLOGY, INC.

CLK1 (K-13): sc-47957

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The CDC-like kinase 1 (CLK1) dually phosphorylates serine- and arginine-rich proteins of the spliceosomal complex, which constitutes a network of regulatory mechanisms that enable SR proteins to control RNA splicing. Specifically, CLK1 may mediate the release of specific proteins from nuclear storage sites. Expression of CLK1 may be very low due to a premature stop codon in the mRNA, which leads to nonsense-mediated mRNA decay. CLK1 activity is positively regulated by phosphorylation on either tyrosine residues or serine/threonine residues. CLK1 activity is negatively regulated by steric constraints mediated by the N-terminal domain and also by phosphorylation on a subset of serine/threonine residues within the catalytic domain.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CLK1 (human) mapping to 2q33.1; Clk1 (mouse) mapping to 1 C1.3.

SOURCE

CLK1 (K-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CLK1 of human origin.

STORAGE

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

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-47957 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CLK1 (K-13) is recommended for detection of CLK1 isoform Long only of mouse 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); may cross-react with CLK4.

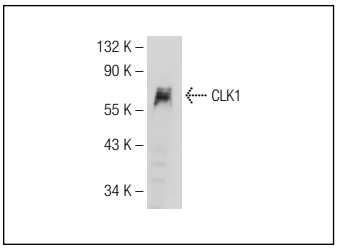
CLK1 (K-13) is also recommended for detection of CLK1 isoform Long only in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for CLK1 siRNA (h): sc-60404, CLK1 siRNA (m): sc-60405, CLK1 shRNA Plasmid (h): sc-60404-SH, CLK1 shRNA Plasmid (m): sc-60405-SH, CLK1 shRNA (h) Lentiviral Particles: sc-60404-V and CLK1 shRNA (m) Lentiviral Particles: sc-60405-V.

Molecular Weight of CLK1: 57 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210.

DATA



CLK1 (K-13): sc-47957. Western blot analysis of CLK1 expression in NIH/3T3 whole cell lysate.

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.