SANTA CRUZ BIOTECHNOLOGY, INC.

CLK1 (H-57): sc-135206

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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, and 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.

SOURCE

CLK1 (H-57) is a rabbit polyclonal antibody raised against amino acids 78-134 mapping near the N-terminus of CLK1 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.

APPLICATIONS

CLK1 (H-57) is recommended for detection of CLK1 of 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).

CLK1 (H-57) is also recommended for detection of CLK1 in additional species, including equine, canine and porcine.

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

Molecular Weight of CLK1: 57 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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.