SANTA CRUZ BIOTECHNOLOGY, INC.

LOK (C-17): sc-83150

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The phosphorylation and dephosphorylation of proteins on serine and threonine residues is an essential means of regulating a broad range of cellular functions in eukaryotes, including cell division, homeostasis and apoptosis. A group of proteins that are intimately involved in this process are the serine/threonine (Ser/Thr) protein kinases. LOK (lymphocyte-oriented kinase), also known as STK10 (serine/threonine kinase 10), is a 968 amino acid protein that contains one protein kinase domain and belongs to the Ser/Thr protein kinase family. Expressed in lymphoid organs, LOK functions to catalyze the ATP-dependent phosphorylation of target proteins, such as MBP (myelin basic protein) and Histone H2A, thereby playing a role in signaling pathways throughout the cell.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: STK10 (human) mapping to 5q35.1; Stk10 (mouse) mapping to 11 A4.

SOURCE

LOK (C-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of LOK 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-83150 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

LOK (C-17) is recommended for detection of LOK of mouse, rat 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).

LOK (C-17) is also recommended for detection of LOK in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for LOK siRNA (h): sc-75685, LOK siRNA (m): sc-75686, LOK shRNA Plasmid (h): sc-75685-SH, LOK shRNA Plasmid (m): sc-75686-SH, LOK shRNA (h) Lentiviral Particles: sc-75685-V and LOK shRNA (m) Lentiviral Particles: sc-75686-V.

Molecular Weight (predicted) of LOK: 112 kDa.

Molecular Weight (observed) of LOK: 130/185 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: 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.