

# CLK2 (D-16): sc-74912

## 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. CLK2 (Cdc-like kinase 2) is a 499 amino acid nuclear protein that contains one protein kinase domain and belongs to the Ser/Thr protein kinase family. Using ATP, CLK2 phosphorylates serine- and arginine-rich (SR) components of the spliceosomal complex, possibly playing a role in the control of RNA splicing. CLK2 exists as two alternatively spliced isoforms, designated short and long, and is encoded by a gene which maps to human chromosome 1.

## CHROMOSOMAL LOCATION

Genetic locus: CLK2 (human) mapping to 1q22; Clk2 (mouse) mapping to 3 F1.

## SOURCE

CLK2 (D-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CLK2 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-74912 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## APPLICATIONS

CLK2 (D-16) is recommended for detection of CLK2 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).

CLK2 (D-16) is also recommended for detection of CLK2 in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for CLK2 siRNA (h): sc-72923, CLK2 siRNA (m): sc-72924, CLK2 shRNA Plasmid (h): sc-72923-SH, CLK2 shRNA Plasmid (m): sc-72924-SH, CLK2 shRNA (h) Lentiviral Particles: sc-72923-V and CLK2 shRNA (m) Lentiviral Particles: sc-72924-V.

Molecular Weight of CLK2 long isoform: 60 kDa.

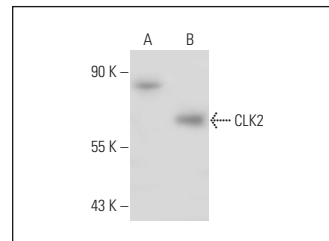
Molecular Weight of CLK2 short isoform: 18 kDa.

Positive Controls: CLK2 (h): 293T Lysate: sc-116461 or COLO 205 whole cell lysate: sc-364177.

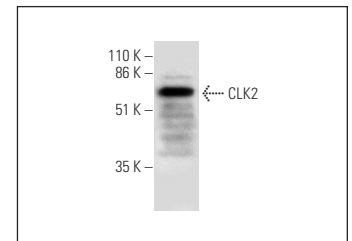
## RECOMMENDED SECONDARY REAGENTS

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.

## DATA



CLK2 (D-16): sc-74912. Western blot analysis of CLK2 expression in non-transfected: sc-117752 (A) and human CLK2 transfected: sc-116461 (B) 293T whole cell lysates.



CLK2 (D-16): sc-74912. Western blot analysis of CLK2 expression in COLO 205 whole cell lysate.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **CLK2 (F-4): sc-393909**, our highly recommended monoclonal alternative to CLK2 (D-16).