

SUDD (D-20): sc-85173

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. SUDD, also known as RIOK3 (RIO kinase 3), is a 519 amino acid protein that contains one protein kinase domain and belongs to the Ser/Thr protein kinase family. Expressed in a variety of tissues, SUDD catalyzes the ATP-dependent phosphorylation of target proteins, thereby influencing signaling events throughout the cell. SUDD is expressed as two isoforms due to alternative splicing events.

REFERENCES

1. Bairoch, A. and Claverie, J.M. 1988. Sequence patterns in protein kinases. *Nature* 331: 22.
2. Hanks, S.K., Quinn, A.M. and Hunter, T. 1988. The protein kinase family: conserved features and deduced phylogeny of the catalytic domains. *Science* 241: 42-52.
3. Hanks, S.K. and Quinn, A.M. 1991. Protein kinase catalytic domain sequence database: identification of conserved features of primary structure and classification of family members. *Meth. Enzymol.* 200: 38-62.
4. Anaya, P., Evans, S.C., Dai, C., Lozano, G. and May, G.S. 1998. Isolation of the *Aspergillus nidulans* SUDD gene and its human homologue. *Gene* 211: 323-329.
5. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 603579. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: RIOK3 (human) mapping to 18q11.2; Riok3 (mouse) mapping to 18 A1.

SOURCE

SUDD (D-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SUDD 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-85173 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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

APPLICATIONS

SUDD (D-20) is recommended for detection of SUDD 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).

SUDD (D-20) is also recommended for detection of SUDD in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for SUDD siRNA (h): sc-76602, SUDD siRNA (m): sc-153915, SUDD shRNA Plasmid (h): sc-76602-SH, SUDD shRNA Plasmid (m): sc-153915-SH, SUDD shRNA (h) Lentiviral Particles: sc-76602-V and SUDD shRNA (m) Lentiviral Particles: sc-153915-V.

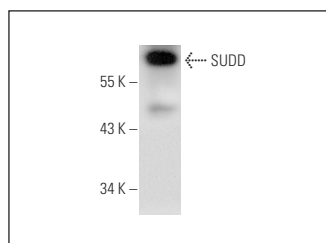
Molecular Weight of SUDD: 60 kDa.

Positive Controls: HeLa nuclear extract: sc-2120 or HeLa whole cell lysate: sc-2200.

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



SUDD (D-20): sc-85173. Western blot analysis of SUDD expression in HeLa whole cell lysate.

RESEARCH USE

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



Try **SUDD (B-3): sc-398232** or **SUDD (RS-31): sc-100435**, our highly recommended monoclonal alternatives to SUDD (D-20).