Cdc25C (C-20): sc-327



The Power to Question

BACKGROUND

Cell cycle events are regulated by the sequential activation and deactivation of cyclin-dependent kinases (Cdks), including Cdk2 and Cdc2. Cdk2, in complexes with cyclin E and cyclin A, appears necessary for the onset and progression of DNA replication, while the Cdc2 kinase, in complexes with cyclin A or cyclin B, is required for the initiation of cell division. Wee 1 has been identified as a protein kinase that suppresses the entry into mitosis by mediating inhibiting tyrosine phosphorylation of Cdc2 p34. In contrast, members of the Cdc25 family of protein phosphatases function as mitotic activators by dephosphorylation of Cdc2 p34 on regulatory tyrosine and possibly threonine residues. The Cdc25 gene family consists of at least three members that share approximately 40% identity in their most conserved carboxy-terminal sequences.

CHROMOSOMAL LOCATION

Genetic locus: CDC25C (human) mapping to 5q31.2; Cdc25c (mouse) mapping to 18 B1.

SOURCE

Cdc25C (C-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of Cdc25C of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-327 P, ($100 \mu g$ peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Cdc25C (C-20) is recommended for detection of Cdc25C of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

Cdc25C (C-20) is also recommended for detection of Cdc25C in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Cdc25C siRNA (h): sc-35038, Cdc25C siRNA (m): sc-35039, Cdc25C shRNA Plasmid (h): sc-35038-SH, Cdc25C shRNA Plasmid (m): sc-35039-SH, Cdc25C shRNA (h) Lentiviral Particles: sc-35038-V and Cdc25C shRNA (m) Lentiviral Particles: sc-35039-V.

Molecular Weight of Cdc25C: 55 kDa.

Positive Controls: KNRK whole cell lysate: sc-2214, NIH/3T3 whole cell lysate: sc-2210 or Raji whole cell lysate: sc-364236.

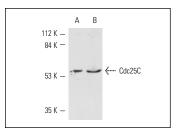
STORAGE

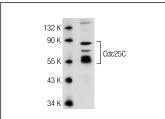
Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

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

DATA





Cdc25C (C-20): sc-327. Western blot analysis of Cdc25C expression in KNRK (**A**) and NIH/3T3 (**B**) whole cell breater

Cdc25C (C-20): sc-327. Western blot analysis of Cdc25C expression in Raji whole cell lysate.

SELECT PRODUCT CITATIONS

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- Chow, J.P. and Poon, R.Y. 2013. The CDK1 inhibitory kinase MYT1 in DNA damage checkpoint recovery. Oncogene 32: 4778-4788.



Try Cdc25C (H-6): sc-13138 or Cdc25C (F-5): sc-55513, our highly recommended monoclonal aternatives to Cdc25C (C-20). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see Cdc25C (H-6): sc-13138.