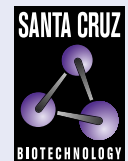


Cdc25C (H-6): sc-13138



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.

SOURCE

Cdc25C (H-6) is a mouse monoclonal antibody raised against amino acids 1-150 of Cdc25C of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Cdc25C (H-6) is available conjugated to agarose (sc-13138 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-13138 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-13138 PE), fluorescein (sc-13138 FITC), Alexa Fluor® 488 (sc-13138 AF488), Alexa Fluor® 546 (sc-13138 AF546), Alexa Fluor® 594 (sc-13138 AF594) or Alexa Fluor® 647 (sc-13138 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-13138 AF680) or Alexa Fluor® 790 (sc-13138 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

In addition, Cdc25C (H-6) is available conjugated to TRITC (sc-13138 TRITC, 200 µg/ml), for IF, IHC(P) and FCM.

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APPLICATIONS

Cdc25C (H-6) is recommended for detection of Cdc25C of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1,000), 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

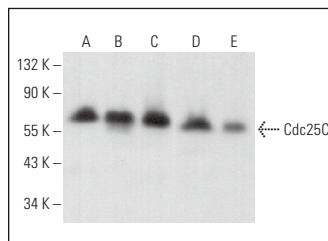
Suitable for use as control antibody for Cdc25C siRNA (h): sc-35038, Cdc25C shRNA Plasmid (h): sc-35038-SH and Cdc25C shRNA (h) Lentiviral Particles: sc-35038-V.

Molecular Weight of Cdc25C: 55 kDa.

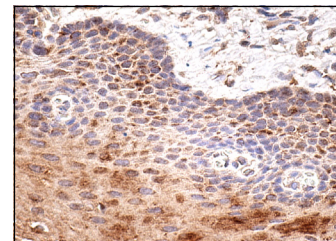
STORAGE

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

DATA



Cdc25C (H-6): sc-13138. Western blot analysis of Cdc25C expression in Raji (A), AN3 CA (B), Caco-2 (C) and HUV-EC-C (D) whole cell lysates and HeLa nuclear extract (E).



Cdc25C (H-6): sc-13138. Immunoperoxidase staining of formalin fixed, paraffin-embedded human esophagus tissue showing cytoplasmic staining of squamous epithelial cells.

SELECT PRODUCT CITATIONS

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- Wei, R.J., et al. 2016. A microtubule inhibitor, ABT-751, induces autophagy and delays apoptosis in Huh-7 cells. *Toxicol. Appl. Pharmacol.* 311: 88-98.
- Yu, G.Q., et al. 2017. 5-bromo-3-(3-hydroxyprop-1-ynyl)-2H-pyran-2-one induces apoptosis in T24 human bladder cancer cells through mitochondria-dependent signaling pathways. *Mol. Med. Rep.* 15: 153-159.
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RESEARCH USE

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