

Cdc20B (E-12): sc-137387

BACKGROUND

WD-repeats are motifs that are found in a variety of proteins and are characterized by a conserved core of 40-60 amino acids that commonly form a tertiary propeller structure. While proteins that contain WD-repeats participate in a wide range of cellular functions, they are generally involved in regulatory mechanisms concerning chromatin assembly, cell cycle control, signal transduction, RNA processing, apoptosis and vesicular trafficking. Cdc20B (cell division cycle 20 homolog B) is a 519 amino acid protein that contains 7 WD repeats and is thought to play a role in cell cycle control. Multiple isoforms of Cdc20B exist due to alternative splicing events. The gene encoding Cdc20B maps to human chromosome 5, which contains 181 million base pairs and comprises nearly 6% of the human genome. Deletion of the p arm of chromosome 5 leads to Cri du chat syndrome, while deletion of the q arm or of chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

REFERENCES

1. van der Voorn, L. and Ploegh, H.L. 1992. The WD-40 repeat. FEBS Lett. 307: 131-134.
2. Neer, E.J., et al. 1994. The ancient regulatory-protein family of WD-repeat proteins. Nature 371: 297-300.
3. Garcia-Higuera, I., et al. 1996. Folding of proteins with WD-repeats: comparison of six members of the WD-repeat superfamily to the G protein β subunit. Biochemistry 35: 13985-13994.
4. Garcia-Higuera, I., et al. 1998. Folding a WD repeat propeller. Role of highly conserved aspartic acid residues in the G protein β subunit and Sec13. J. Biol. Chem. 273: 9041-9049.
5. Smith, T.F., et al. 1999. The WD repeat: a common architecture for diverse functions. Trends Biochem. Sci. 24: 181-185.
6. Li, D. and Roberts, R. 2001. WD-repeat proteins: structure characteristics, biological function, and their involvement in human diseases. Cell. Mol. Life Sci. 58: 2085-2097.

CHROMOSOMAL LOCATION

Genetic locus: CDC20B (human) mapping to 5q11.2; Cdc20b (mouse) mapping to 13 D2.2.

SOURCE

Cdc20B (E-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of Cdc20B of human origin.

PRODUCT

Each vial contains 100 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-137387 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

Cdc20B (E-12) is recommended for detection of Cdc20B isoforms 1-5 of mouse and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with Cdc20.

Cdc20B (E-12) is also recommended for detection of Cdc20B isoforms 1-5 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Cdc20B siRNA (h): sc-91769, Cdc20B siRNA (m): sc-142207, Cdc20B shRNA Plasmid (h): sc-91769-SH, Cdc20B shRNA Plasmid (m): sc-142207-SH, Cdc20B shRNA (h) Lentiviral Particles: sc-91769-V and Cdc20B shRNA (m) Lentiviral Particles: sc-142207-V.

Molecular Weight of Cdc20B: 57 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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.

PROTOCOLS

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


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 Guaranteed

Try **Cdc20B (2F2): sc-517066**, our highly recommended monoclonal alternative to Cdc20B (E-12).