

Cdc20 Polyclonal Antibody

Catalog # AP68974

Product Information

Application WB, IHC-P Primary Accession Q12834

Reactivity Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW54723

Additional Information

Gene ID 991

Other Names CDC20; Cell division cycle protein 20 homolog; p55CDC

Dilution WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300.

ELISA: 1/20000. Not yet tested in other applications. IHC-P~~N/A

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium

azide.

Storage Conditions -20°C

Protein Information

Name CDC20

Function Substrate-specific adapter of the anaphase promoting complex/cyclosome

(APC/C) complex that confers substrate specificity by binding to substrates and targeting them to the APC/C complex for ubiquitination and degradation (PubMed:<u>9734353</u>, PubMed:<u>27030811</u>, PubMed:<u>29343641</u>). Recognizes and binds the destruction box (D box) on protein substrates (PubMed:<u>29343641</u>).

Involved in the metaphase/anaphase transition of cell cycle (PubMed:32666501). Is regulated by MAD2L1: in metaphase the MAD2L1-CDC20-APC/C ternary complex is inactive and in anaphase the

CDC20-APC/C binary complex is active in degrading substrates

(PubMed: 9811605, PubMed: 9637688). The CDC20-APC/C complex positively regulates the formation of synaptic vesicle clustering at active zone to the

presynaptic membrane in postmitotic neurons (By similarity).

CDC20-APC/C-induced degradation of NEUROD2 induces presynaptic differentiation (By similarity). The CDC20- APC/C complex promotes proper dilation formation and radial migration by degrading CCDC41 (By similarity).

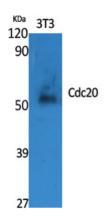
Cellular Location Cytoplasm, cytoskeleton, microtubule organizing center, centrosome.

Chromosome, centromere, kinetochore. Cytoplasm, cytoskeleton, spindle

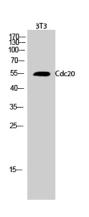
Background

Required for full ubiquitin ligase activity of the anaphase promoting complex/cyclosome (APC/C) and may confer substrate specificity upon the complex. Is regulated by MAD2L1: in metaphase the MAD2L1-CDC20-APC/C ternary complex is inactive and in anaphase the CDC20-APC/C binary complex is active in degrading substrates. The CDC20-APC/C complex positively regulates the formation of synaptic vesicle clustering at active zone to the presynaptic membrane in postmitotic neurons. CDC20-APC/C-induced degradation of NEUROD2 induces presynaptic differentiation.

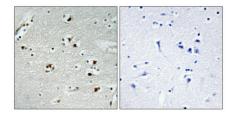
Images



Western Blot analysis of various cells using Cdc20 Polyclonal Antibody diluted at 1: 2000



Western Blot analysis of 3T3 cells using Cdc20 Polyclonal Antibody diluted at 1: 2000



Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100(4°,overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.

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