



Cdc20 (Cell Division Cycle Protein 20) Antibody - With **BSA** and Azide

Mouse Monoclonal Antibody [Clone CDC20/1102] Catalog # AH12829

Product Information

Application IHC, IF, FC O12834 **Primary Accession** 991, 524947 Other Accession Reactivity Human Host Mouse Clonality Monoclonal

Isotype Mouse / IgG1, kappa

Clone Names CDC20/1102

Calculated MW 54723

Additional Information

Gene ID 991

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

Application Note IHC~~1:100~500 IF~~1:50~200 FC~~1:10~50

Storage Store at 2 to 8°C. Antibody is stable for 24 months.

Precautions Cdc20 (Cell Division Cycle Protein 20) Antibody - With BSA and Azide is for

research use only and not for use in diagnostic or therapeutic procedures.

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: 29343641).

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 pole

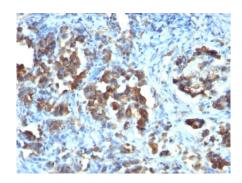
Background

Cyclins, regulatory subunits, which associate with kinases, control many of the important steps in cell cycle progression. The Cdc2 protein kinase (p34Cdc2) exhibits protein kinase activity in vitro and exists in a complex with both cyclin B and a protein homologous to p13SUC1. Cdc2 kinase is the active subunit of the M phase promoting factor (MPF) and the M phase-specific Histone H1 kinase. The p34Cdc2/cyclin B complex is required for the G2 to M transition. An additional cell cycle-dependent protein kinase, termed p55cdc, exhibits a high degree of homology with the S. cerevisiae proteins Cdc20 and Cdc4. The p55cdc transcript is readily detectable in a variety of cultured cell lines in growth phase, but disappears when cell growth is chemically arrested.

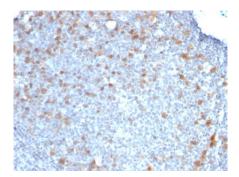
References

Sironi L et al. 2001. EMBO J. 20(22):6371-82.

Images



Formalin-fixed, paraffin-embedded human Gastric Carcinoma stained with CDC20 Monoclonal Antibody (CDC20/1102)



Formalin-fixed, paraffin-embedded human Tonsil stained with CDC20 Monoclonal Antibody (CDC20/1102)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.