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# Product datasheet for R1508

## CDC20 (C-term) Rabbit Polyclonal Antibody

## **Product data:**

Product Type:	Primary Antibodies
Applications:	ELISA, IP, WB
Recommended Dilution:	<ul> <li><u>Western blot</u>: This antibody reacts with human CDC20 (fizzy) (1:500 - 1:1,000).</li> <li><u>Immunoprecipitation</u>: The antibody immunoprecipitates in vitro translated protein and protein from overexpressing cell lysates (using HeLa and NIH-3T3, and others).</li> <li>Coimmunoprecipitation of related proteins has not been determined. A 54.7 kDa band corresponding to human CDC20 (fizzy) is detected. Most cell lines or tissues expressing CDC20 can be used as a positive control.</li> <li><u>ELISA</u>: 1:2,000-1:10,000 Dilution.</li> </ul>
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to amino acids 486-499 of Human CDC20 (fizzy) (C-terminal) coupled to KLH.
Specificity:	This product is monospecific antiserum processed by delipidation and defibrination followed by sterile filtration. This product reacts with human CDC20 (fizzy). Cross reactivity may also occur with CDC20 from other sources.
Formulation:	State: Serum State: Liquid (sterile filtered) with 0.01% (w/v) Sodium Azide as preservative.
Concentration:	lot specific
Purification:	Delipidation and defibrination.
Conjugation:	Unconjugated
Storage:	Store vial at -20°C prior to opening. Centrifuge product if not completely clear after standing at room temperature. Dilute only prior to immediate use. For extended storage aliquot contents and freeze at -20°C or below. Avoid cycles of freezing and thawing.



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	CDC20 (C-term) Rabbit Polyclonal Antibody – R1508 Shelf life: one year from despatch.				
Stability:					
Gene Name:	cell division cycle 20				
Database Link:	<u>Entrez Gene 991 Human</u> <u>Q12834</u>				
Background:	CDC20, also known as fizzy, Cell division cycle protein 20 homolog, and p55CDC is required for full ubiquitin ligase activity of the anaphase promoting complex/cyclosome (APC/C) and may confer substrate specificity upon the complex. CDC20 appears to act as a regulatory protein interacting with several other proteins at multiple points in the cell cycle. It is required for two microtubule-dependent processes, nuclear movement prior to anaphase and chromosome separation. CDC20 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 phosphorylated form of CDC20 interacts with APC/C. Synthesis is initiated at G1/S, protein level peaks in M phase and protein is abruptly degraded at M/G1 transition.				
Synonyms:	p55CDC				

## **Product images:**

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	Maturation		Conjugation	
UBLs	C-terminal hydrolase	Mature	Activating Conjugating Ligase Substrate enzyme enzyme E3 E1 E2	Function
Ubiquitin		•	ATP UBA1 UBC1-8, or APC, SCF, Several 10,11,13 CBC, etc.	Proteasome dependent proteolysis, endocytosis
SUMO	<mark>.</mark> →	•	ATP SI ACS1/ UBA2 2 - ? - Several	Targeting? Protein stabilization
RUB	øa →	•	ATP S → S - SCF, CBC → ULA1/ UBA3 UBC12 etc Cullins	Regulation?
HUB	oa→	•		?
UCRP	<mark>⊶</mark> + →	••		7
APG12		•	ATP S APG10 APG5	Autophagy
URM1				?

Figure 1. Conjugation pathways for ubiquitin and ubiquitin-like modifiers (UBLs). Most modifiers mature by proteolytic processing from inactive precursors (a; amino acid). Arrowheads point to the cleavage sites. Ubiquitin is expressed either as polyubiquitin or as a fusion with ribosomal proteins. Conjugation requires activating (E1) and conjugating (E2) enzymes that form thiolesters (S) with the modifiers. Modification of cullins by RUB involves SCF (SKP1/cullin-1/F-box protein) /CBC (cullin-2/elongin B/elongin C)-like E3 enzymes that are also involved in ubiquitination. In contrast to ubiguitin, the UBLs do not seem to form multi-UBL chains. UCRP (ISG15) resembles two ubiquitin moieties linked headto- tail. Whether HUB1 functions as a modifier is currently unclear. APG12 and URM1 are distinct from the other modifiers because they are unrelated in sequence to ubiquitin. Data contributed by S.Jentsch, see references above.

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