

Rabbit CDC20 Polyclonal Antibody | anti-CDC20 antibody

Phospho-CDC20 (Ser51) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA329472	Rabbit	Human, Mouse, Rat Predicted Reactivity: Pig (100%), Bovine (100%), Horse (100%), Rabbit (100%), Dog (100%)	ELISA, Western Blot

PRODUCT SYNONYMS

CDC20; Polyclonal Antibody; Phospho-CDC20 (Ser51) Antibody; bA276H19.3; Cdc 20; CDC20 cell division cycle 20 homolog; CDC20_HUMAN; CDC20A; Cell division cycle 20; Cell division cycle 20 homolog (S. cerevisiae); Cell division cycle 20 homolog; Cell division cycle protein 20 homolog; fizzy; MGC102824; p55CDC; anti-CDC20 antibody

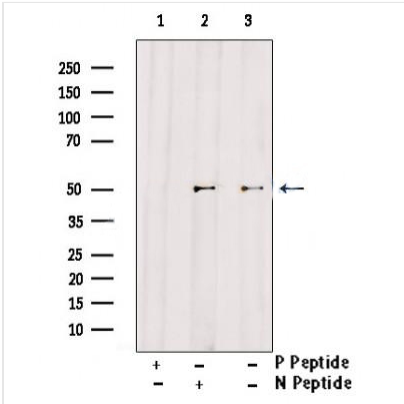
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat Predicted Reactivity: Pig (100%), Bovine (100%), Horse (100%), Rabbit (100%), Dog (100%)
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Phospho-CDC20 (Ser51) Antibody detects endogenous levels of CDC20 only when phosphorylated at Ser51.
Purity/Purification	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho-peptide and non-phospho-peptide affinity columns.
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-CDC20 antibody	ELISA (Peptide ELISA), WB (Western Blot)
Immunogen	A synthesized peptide derived from human CDC20 around the phosphorylation site of Ser51.
Conjugation	Unconjugated
Fragment	Fab fragment
Post Translational Modifications	Acetylated. Deacetylated at Lys-66 by SIRT2; deacetylation enhances the interaction of CDC20 with CDC27, leading to activation of anaphase promoting complex/cyclosome (APC/C). Phosphorylated during mitosis, probably by maturation promoting factor (MPF). Phosphorylated by BUB1 at Ser-41; Ser-72; Ser-92; Ser-153; Thr-157 and Ser-161. Phosphorylated by NEK2. Dephosphorylated by CTD1P1. Ubiquitinated and degraded by the proteasome during spindle assembly checkpoint. Deubiquitinated by USP44, leading to stabilize the MAD2L1-CDC20-APC/C ternary complex, thereby preventing premature activation of the APC/C. Ubiquitinated at Lys-490 during prometaphase. Ubiquitination at Lys-485 and Lys-490 has no effect on its ability to bind the APC/C complex.
Subunit Structure	Found in a complex with CDC20, CDC27, SPATC1 and TUBG1. Interacts with NEUROD2 and SPATC1 (By similarity). Interacts with MAD2L1 and BUB1B. The phosphorylated form interacts with APC/C. Interacts with NINL. May interact with MAD2L2. Interacts with CDK5RAP2 and SIRT2. Interacts with isoform 1 of NEK2. Interacts with HSF1 (via phosphorylated form); this interaction occurs in mitosis in a MAD2L1-dependent manner and prevents PLK1-stimulated degradation of HSF1 by blocking the recruitment of the SCF (BTRC) ubiquitin ligase complex. Interacts (via the N-terminal substrate-binding domain) with FBXO5 (By similarity).
Similarity	Belongs to the WD repeat CDC20/Fizzy family.
Subcellular Location	Cytoplasm>Cytoskeleton>Microtubule organizing center>Centrosome. Cytoplasm>Cytoskeleton>Spindle pole.

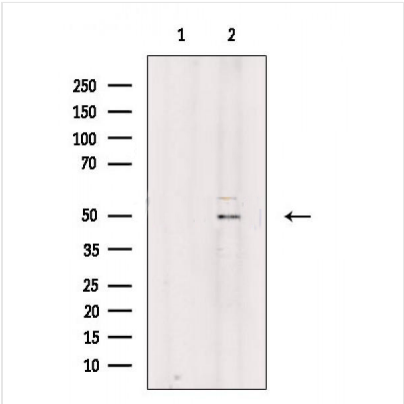
Preparation and Storage

Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



WB (Western Blot)
Western blot analysis of extracts from Jurkat, using Phospho-CDC20 (Ser51) Antibody. Lane1 was treated with phospho-blocking peptide, Lane2 was treated with non-phospho-blocking peptide.



WB (Western Blot)
Western blot analysis of extracts from HepG2 cells(LPS 4h treatment), using Phospho-CDC20 (Ser51) Antibody. The lane on the left was treated with blocking peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-CDC20 antibody	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.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	118402582
NCBI GeneID	991
NCBI Accession #	NP_001246.2
NCBI GenBank Nucleotide #	NM_001255.2
UniProt Accession #	Q12834; Q5JUY4; Q9BW56; Q9UQI9; B2R6Z6; D3DPJ1
Molecular Weight	54,723 Da
NCBI Official Full Name	cell division cycle protein 20 homolog
NCBI Official Synonym Full Names	cell division cycle 20
NCBI Official Symbol	CDC20
NCBI Official Synonym Symbols	CDC20A; p55CDC; bA276H19.3
NCBI Protein Information	cell division cycle protein 20 homolog; cell division cycle 20 homolog; CDC20 cell division cycle 20 homolog
UniProt Protein Name	Cell division cycle protein 20 homolog
UniProt Gene Name	CDC20
UniProt Entry Name	CDC20_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

