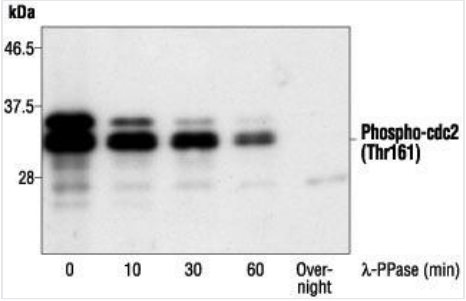
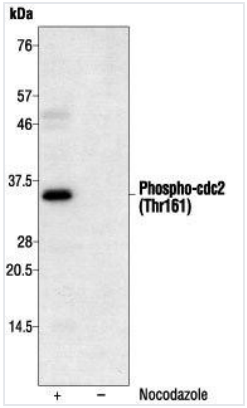
cdc2 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

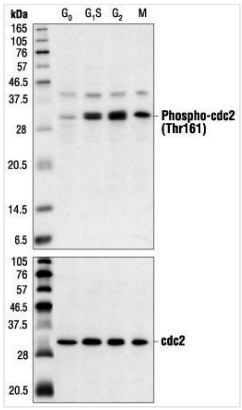
Product Name	cdc2, Polyclonal Antibody
Full Product Name	cdc2, phosphorylated (Thr161)
Product Gene Name	anti-cdc2 antibody
Product Synonym Names	Anti -cdc2, phosphorylated (Thr161)
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human, Mouse, Rat
Form/Format	Supplied as a liquid in 10mM HEPES, pH 7.5, 150mM sodium chloride, 0.1mg/ml BSA, 50% glycerol. No preservative added.
Purity/Purification	Affinity Purified Purified by Protein A affinity chromatography.
Specificity	Detects endogenous levels of cdc2 only when phosphorylated at Thr161. Crossreacts with endogenous cdk2 phosphorylated at Thr160. Species Crossreactivity: Mouse and rat.
Preparation and Storage	May be stored at 4 degree C for short-term only. For long-term storage, store at -20 degree C. Aliquots are stable for at least 12 months at -20 degree C. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap. Further dilutions can be made in assay buffer.
Chromosome Location	Chromosome: 2L; NT_033779.4 (10384739..10386263, complement). Location: 31D11-31D11
Immunogen	Synthetic phosphopeptide corresponding to residues surrounding Thr161 of human cdc2 (KLH coupled).
Product Categories/Family for anti-cdc2 antibody	Antibodies; Abs to Protein Kinases
Applications Tested/Suitable for anti-cdc2 antibody	ELISA (EL/EIA), Western Blot (WB), Immunoprecipitation (IP), Immunocytochemistry (ICC), Immunofluorescence (IF)
Application Notes for anti-cdc2 antibody	Suitable for use in ELISA, Western Blot, Immunoprecipitation, Immunocytochemistry and Immufluorescence. Dilution: Western Blot: 1:1000. Incubate membrane with diluted antibody in TBS, 5% BSA, 0.1% Tween-20 at 4 degree C with gentle shaking, overnight. Immunoprecipitation: 1:50 Immunocytochemistry (for IF): 1:200
Related Product Information for anti-cdc2 antibody	Entry of all eukaryotic cells into M-phase of the cell cycle is regulated by activation of cdc2 kinase. Activation of cdc2 is controlled at several steps including cyclin binding and phosphorylation of threonine 161 (1-4). The critical regulatory step in activating cdc2 during progression into mitosis appears to be dephosphorylation of tyrosine 15 and threonine 14 (3,5). Phosphorylation at Tyr15 and inhibition of cdc2 is carried out by Wee1 and Myt1 protein kinases. Tyr15 dephosphorylation and activation of cdc2 is carried out by the cdc25 phosphatase (3,4,6). cdc2 activation requires phosphorylation at Thr161, which is attributed to the cdk-activating kinase CAK, a complex of cdk7 and cyclin H (7). Phosphorylation at Thr161 is also required for association with cyclin A (8).
Other Notes	Small volumes of anti-cdc2 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for cdc2 purchase	MBS623445 is an antibody targeting cdc2. Also known as cdc2, phosphorylated (Thr161). Reactive in Human, Mouse, Rat. Host: Rabbit.



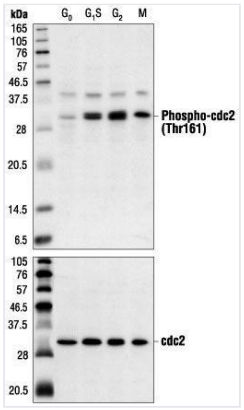
Western Blot (WB) of anti-cdc2 antibody
Western blot analysis of lambda protein phosphatase (lambda-PPase) treated cdc2 kinase, using MBS623445



Western Blot (WB) of anti-cdc2 antibody
Western blot analysis of HeLa samples immunoprecipitated with MBS623445and then probed with control cdc2 (POH1) Monoclonal Antibody #9116.



Western Blot (WB) of anti-cdc2 antibody
Western blot analysis of extracts from HeLa cells synchronized and enriched for different stages of the cell cycle, and probed with MBS623445(upper) or control cdc2 (POH1) Monoclonal Antibody #9116 (lower).



Immunofluorescence (IF) of anti-cdc2 antibody
Dual immunofluorescent staining of growing HeLa cells, using cdc2 (POH1) Monoclonal Antibody (left) or MBS623445(right).

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for cdc2. It may not necessarily be applicable to this product.

NCBI GI #	17136606
NCBI GeneID	34411
NCBI Accession #	NP_476797.1
GenBank Nucleotide #	NM_057449.3
NCBI Official Full Name	cdc2
NCBI Official Symbol	cdc2
NCBI Official Synonym Symbols	5363; cdc; Cdc2; CDC2; cdc2Dm; CDCDm; cdk1; Cdk1; CDK1; CDK1/CDC2; CG5363; Dcdc2; Dm cdc2; Dmcdc2; DmCdc2; DmCdk1; DmelCG5363; group 4; l(2)31Eh
Protein Family	Cell division protein kinase
NCBI Protein Information	CG5363 gene product from transcript CG5363-RA; cdc2; CG5363-PA; cdc2-PA; cyclin-dependent kinase 1; CDC2 kinase; cyclin dependent kinase
Research Articles on cdc2	**1.** Based on the results obtained, it was presupposed that distribution of annulate lamellae containing cytoplasmic pores could reflect the inactivation of the mitotic kinase cdk1 in Drosophila syncytial embryos.

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