## Cdk2 / p34cdc2 Serine-Threonine Kinase **Monoclonal Mouse Antibody (AN4.3)**



## **Product Description**

In vertebrates, as in yeast, multiple cyclins have been identified, including a total of eight such regulatory proteins in mammals. In contrast to the situation in yeast, the Cdc2 p34 kinase is not the only catalytic subunit identified in vertebrates that can interact with cyclins. While Cdc2 p34 is essential for the G2 to M transition in vertebrate cells, a second Cdc2-related kinase has also been implicated in cell cycle control. This protein, designated cyclindependent kinase 2 (Cdk2), also binds to cyclins and its kinase activity is temporally regulated during the cell cycle. Several additional Cdc2-related cyclin dependent kinases have been identified. These include Cdk3, Cdk4, Cdk5, PCTAIRE-1, PCTAIRE-2, PCTAIRE-3, Cdk6 Cdk7, Cdk8 and KKIALRE. Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the CF® Dye Brochure for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors. Stock status: Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email order@biotium.com to inquire about stock status and lead times before placing your order.

## References

Note: References for this clone sold by other suppliers may be listed for expected applications.

Cell Cycle (2016) 15(23):3203-3209. (WB)

Product attributes			
Antibody number	#2316		
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Antibody reactivity (target)	Cdk2, p34cdc2 Serine-Threonine Kinase		
Antibody type	Primary		
Host species	Mouse		
Clonality	Monoclonal		
Clone	AN4.3		
Isotype	IgG2a, kappa		
Molecular weight	34 kDa		
Synonyms	Cdc2 related protein kinase; CDC28; CDC2A; CDK1; CDK2; CDKN2; Cell devision kinase 2; Cell division protein kinase 2; cyclin dependent kinase 2 alpha; kinase Cdc2; MPF; p33 protein kinase		
Human gene symbol	CDK2		
Entrez gene ID	1017		
SwissProt	P24941		
Unigene	19192		
Immunogen	Recombinant full-length human Cdk2 protein		
Antibody target cellular	Nucleus		
Species reactivity	Human, Mouse, Xenopus laevis		
Expected antibody	WB (published for clone)		
Antibody application notes	Inhibits activation of p34cdc2 kinase by cyclins; Immunoprecipitation; Kinase Assay; Western blot; Flow cytometry: 1-2 ug/mL; Optimal dilution for a specific application should be determined.		
Positive control	HeLa cells. HeLa whole cell lysate.		
Shipping condition	Room temperature		
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C		
Regulatory status	For research use only (RUO)		
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide		
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended		

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Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	CF®405S Features
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified,	N/A	N/A	N/A	

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