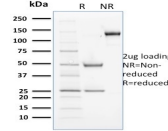


Cyclin B2 Monoclonal Mouse Antibody (X29.2)



Product Description

In eukaryotic cells, mitosis is initiated following the activation of a protein kinase known variously as maturation-promoting factor, M phase specific histone kinase or M-phase kinase. This protein kinase is composed of a catalytic subunit (Cdc2), a regulatory subunit (cyclin B) and a low molecular weight subunit (p13-Suc1). The Cdc/cyclin enzyme is subject to multiple levels of control, of which the regulation of the catalytic subunit by tyrosine phosphorylation is the best understood. Tyrosine phosphorylation inhibits the Cdc2/ cyclin B enzyme, and tyrosine dephosphorylation, occurring at the onset of mitosis, directly activates the pre-MPF complex. Evidence has established that B type cyclins not only act on M phase regulatory subunits of the Cdc2 protein kinase, but also activate the Cdc25A and Cdc25B endogenous tyrosine phosphatase, of which Cdc2 is the physiological substrate. The two B type cyclins, cyclin B1 and cyclin B2, have been shown to have distinct tissue distributions. 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.

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Product attributes

Antibody number	#3059
Antibody reactivity (target)	Cyclin B2
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	X29.2
Isotype	IgG1, kappa
Molecular weight	51 kDa
Synonyms	ccnb2; CycB2; Cyclin B2; G2 mitotic specific cyclin B2; HsT17299; MGC108931; MGC140694
Human gene symbol	CCNB2
Entrez gene ID	9133
SwissProt	O95067
Unigene	194698
Immunogen	Recombinant full-length Xenopus laevis Cyclin B2 protein
Antibody target cellular localization	Cytoplasmic
Species reactivity	Human, Mouse, Rat, Xenopus laevis
Expected antibody applications	IF (published for clone)
Antibody application notes	ELISA: For coating, order antibody without BSA; Optimal dilution for a specific application should be determined. Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody
Positive control	HeLa cells. Human cervical tissue (IHC).
Shipping condition	Room temperature
Storage Conditions	Note: store BSA-free antibodies at -10 to -35°C, Store at 2 to 8°C, Protect fluorescent conjugates from light
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

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, BSA-free	N/A	N/A	N/A	

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