

Datasheet: VMA00732

Description:	MOUSE ANTI CYCLIN B1
Specificity:	CYCLIN B1
Format:	Purified
Product Type:	PrecisionAb Monoclonal
Clone:	EF02/2D4-1
Isotype:	IgG2b
Quantity:	100 µl

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Western Blotting	▪			1/1000

The PrecisionAb label is reserved for antibodies that meet the defined performance criteria within Bio-Rad's ongoing antibody validation programme. Click [here](#) to learn how we validate our PrecisionAb range. Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Further optimization may be required dependent on sample type.

Target Species	Human
Product Form	Purified IgG - Liquid
Preparation	Mouse monoclonal antibody affinity purified on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	<i>E. coli</i> --derived recombinant protein of amino acids 1-433 of human cyclin B1

**External Database
Links**

UniProt:

[P14635](#) [Related reagents](#)

Entrez Gene:

[891](#) CCNB1 [Related reagents](#)

Synonyms

CCNB

Fusion Partners

Spleen cells from immunised BALB/c mice were fused with cells of the mouse SP2/0 myeloma cell line

Specificity

Mouse anti Human cyclin B1 antibody recognizes the G2/mitotic-specific cyclin-B1, also known as CCNB1.

Progression through the cell cycle is controlled by timely interaction between cyclins and cyclin-dependent kinases (CDKs), and cyclin B1 is required for cell division ([Strauss et al. 2018](#)). The complex between cyclin B1 and Cdk1 regulates entry into mitosis after G2 phase, synchronizing the breakdown of the nuclear envelope and separation of centrosomes ([Wang et al. 2014](#)). The protein p21 can prevent untimely entry into mitosis by inhibiting cyclin B1, holding the cyclin B1/Cdk1 complex in the nucleus and activating degradation of cyclin B1 in response to DNA damage ([Jang et al. 2016](#)). Cyclin B1 is overexpressed in numerous malignant tumors, and is significantly associated with poor overall survival of patients with solid tumors. This finding has suggested that cyclin B1 could be a prognostic marker for these cancer types ([Ye et al. 2017](#)).

Western Blotting

Mouse anti cyclin B1 detects a band of approximately 56 kDa in K562 cell lysates

Storage

Store undiluted at -20°C, avoiding repeated freeze thaw cycles

Guarantee

12 months from date of despatch

Acknowledgements

PrecisionAb is a trademark of Bio-Rad Laboratories

**Health And Safety
Information**

Material Safety Datasheet documentation #10040 available at:
<https://www.bio-rad-antibodies.com/SDS/VMA00732>
Antibody (10040)

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (H/L) (STAR207...) [HRP](#)

Recommended Negative Controls

[MOUSE IgG2b NEGATIVE CONTROL \(MCA691\)](#)

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batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

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