

## PRODUCT INFORMATION SHEET

### Mouse Monoclonal Antibody to CCND1

Format: PURE      RUO      REF      IQP-1417P      Volume: 0.1ml



#### Description

**Clone** 3D8

**Isotype** Mouse IgG1

**Specificity** CCND1

**Alternative names** BCL1; PRAD1; U21B31; D11S287E; CCND1

**Species** Human

**Immunogen** Purified recombinant fragment of human CCND1 expressed in E. Coli.

**Mw** 33.7kDa

**Format** Ascitic fluid containing 0.03% sodium azide.

**Summary** During each cell cycle cyclins undergo periodic accumulation and destruction. As key regulators of the cell cycle the cyclins control important transitions by acting as regulatory subunits of the Cdks. Early in the G1 phase of the cell cycle, cyclin D1 induction is followed by cyclin E induction. This sequential progression is marked early on in G1 by the activation of Cdk4 and in mid to late G1 by the activation of Cdk2 and the hyperphosphorylation of pRB. The final transition into S phase is thought to be dependent on the increased expression and association of cyclin E and Cdk2. In a recent study, Cyclin D1 regulates cellular metabolism, fat cell differentiation and cellular migration. Cyclin D1 is also involved in development and cancer. Cyclin D1 has also been linked to the development and progression of several cancers including breast, bladder, esophagus, and lung.

**Applications** Western Blotting: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications. Determine optimal working dilutions by titration test.

#### Limitations

1. Conjugates with brighter fluorochromes, like PE and APC, will have a greater separation than those with dyes like FITC and CyQ. When populations overlap, the percentage of positive cells using a selected marker can be affected by the choice of fluorescent label.
2. Use of monoclonal antibodies in patient treatment can interfere with antigen target recognition by this reagent. This should be taken into account when samples are analyzed from patients treated in this fashion. IQ Products has not characterized the effect of the presence of therapeutic antibodies on the performance of this reagent.
3. Reagents can be used in different combinations, therefore laboratories need to become familiar performance characteristics of each antibody in relation with the combined markers in normal and abnormal samples.
4. Reagent data performance is based on EDTA-treated blood. Reagent performance can be affected by the use of other anticoagulants.



#### Handling and Storage

Store the vials at 2-8°C for a maximum of 2 weeks and store at -20°C for longer term storage. Monoclonal antibodies should be protected from prolonged exposure to light when conjugated with fluorochromes. Reagents are stable for the period shown on the vial label when stored properly.

**Warranty** Products sold hereunder are warranted only to conform to the quantity and contents stated on the label at the time of delivery to the customer. There are no warranties, expressed or implied,

which extend beyond the description on the label of the product. IQ Products is not liable for property damage, personal injury, or economic loss caused by the product.

### Characterization

To ensure consistently high-quality reagents, each batch of monoclonal antibody is tested for conformance with characteristics of a standard reagent.

### Warning

All products contain sodium azide. This chemical is poisonous and hazardous. Handling should be done by trained staff only.












---

### References

- 1.J Orthop Sci. 2009 Sep;14(5):623-30.
- 2.Mod Pathol. 2010 Feb;23(2):225-34.

---

### Explanation of used symbols

	Consult instructions for use
	Catalogue number
	Sufficient for
	Caution, consult accompanying document
	Keep away from (sun)light
	Biological risks
	Temperature limitation (°C)
	For Research Use Only
	Batch code
	Use by yyyy-mm-dd
	Manufacturer

---

		<b>Label - tandem</b>	<b>Ex -max (nm)</b>	<b>Em -max (nm)</b>
P	PURE	purified material	-	-
F	FITC	FITC	488	519
R	R-PE	PE	488, 532	578
C	CyQ	PE-Cy5.18	488, 532	667
A	APC		595, 633, 635, 647	660
PC	PerCP		488, 532	678
PCC	PerCP-Cy5.5		488, 532	695



IQ Products BV  
Rozenburglaan 13a  
9727 DL Groningen, The Netherlands

-  +31 (0)50 57 57 000
-  +31 (0)50 57 57 002
-  Technical [marketing@iqproducts.nl](mailto:marketing@iqproducts.nl)
-  Orders [orders@iqproducts.nl](mailto:orders@iqproducts.nl)
-  [www.iqproducts.nl](http://www.iqproducts.nl)