

SM1424P**Monoclonal Antibody to Cyclin D1 - Aff. Purified**

Alternate names:	BCL-1 oncogene, BCL1, CCND1, Cyclin-D1, G1/S-specific cyclin-D1, PRAD-1 oncogene, PRAD1
Quantity:	0.1 mg
Concentration:	1.0 mg/ml
Background:	<p>Cyclin D1 a 36kD nuclear protein. D type cyclins are predominantly expressed in the G1 phase of the cell cycle. Cyclin D1 study is of interest in various forms of malignancy, and over expression has been linked to poor prognosis.</p> <p>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.</p> <p>In a recent study, Cyclin D1 regulates cellular metabolism, fat cell differentiation and cellular migration. Cyclin D1 is also involved in development and cancer.</p>
Uniprot ID:	P24385
NCBI:	NP_444284.1
GenID:	595
Host / Isotype:	Mouse / IgG1
Recommended Isotype Controls:	SM10P (for use in human samples), AM03095PU-N
Clone:	CD1.1
Immunogen:	Human Cyclin D1. Spleen cells from immunised mice were fused with cells of the mouse Sp-2 myeloma cell line.
Format:	State: Liquid purified IgG fraction. Purification: Affinity Chromatography on Protein A. Buffer System: PBS containing 0.09% Sodium Azide as preservative.
Applications:	Flow Cytometry (neat): Membrane permeabilisation is required for this application. ELISA. Immunoprecipitation. Western Blot: 1/500. Immunohistochemistry on Frozen Sections. Immunohistochemistry on Paraffin Sections: 1/1000-1/10000. This product requires antigen retrieval using heat treatment prior to staining of paraffin sections; Sodium citrate buffer pH 6.0 is recommended for this purpose. Recommended Positive Control: Small intestine, colon. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

- Specificity:** This antibody recognises the Cyclin D1.
Species: Human and Rat.
Other species not tested.
- Storage:** Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.