

## 36-3088: Anti-Cyclin D1 (G1-Cyclin & Mantle Cell Lymphoma Marker) Monoclonal Antibody(Clone: CCND1/2593)

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	CCND1/2593
<b>Application :</b>	IHC
<b>Reactivity :</b>	Human
<b>Gene :</b>	CCND1
<b>Gene ID :</b>	595
<b>Uniprot ID :</b>	P24385
<b>Alternative Name :</b>	B cell CLL/lymphoma 1; B cell leukemia 1; B-cell lymphoma 1 protein; BCL-1 oncogene; CCND1 protein; CCND1/FSTL3 fusion gene; CCND1/IGHG1 fusion gene CCND1/IGLC1 fusion gene; CCND1/PTH fusion gene; G1/S-specific cyclin-D1, Parathyroid adenomatosis 1, PRAD1 oncogene
<b>Isotype :</b>	Mouse IgG1, kappa
<b>Immunogen Information :</b>	Recombinant full-length human CCND1 protein

### Description

Recognizes a protein of 36kDa, identified as cyclin D1. Cyclin D1, one of the key cell cycle regulators, is a putative proto-oncogene overexpressed in a wide variety of human neoplasms. This antibody neutralizes the activity of cyclin D1 in vivo. About 60% of mantle cell lymphomas (MCL) contain a t(11; 14)(q13; q32) translocation resulting in over-expression of cyclin D1. This antibody is useful in identifying mantle cell lymphomas (cyclin D1 positive) from CLL/SLL and follicular lymphomas (cyclin D1 negative). Occasionally, hairy cell leukemia and plasma cell myeloma weakly express Cyclin D1.

### Product Info

<b>Amount :</b>	20 µg / 100 µg
<b>Content :</b>	200 µg/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
<b>Storage condition :</b>	Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous.

### Application Note

Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 minutes at RT)(Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes);

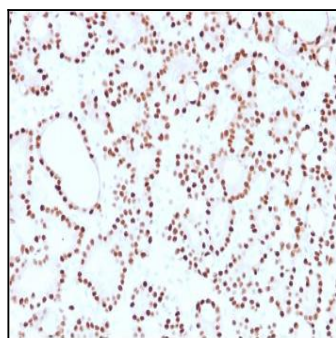


Fig. 1: Formalin-fixed, paraffin-embedded human thyroid carcinoma stained with Cyclin D1 Mouse Monoclonal Antibody (CCND1/2593).

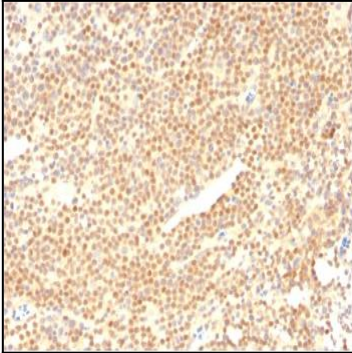


Fig. 2: Formalin-fixed, paraffin-embedded human Mantle Cell Lymphoma stained with Cyclin D1 Mouse Monoclonal Antibody (CCND1/2593).

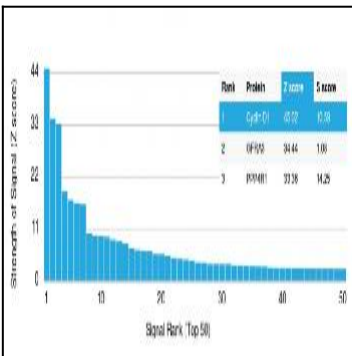


Fig. 3: Analysis of Protein Array containing more than 19,000 full-length human proteins using Cyclin D1 Mouse Monoclonal Antibody (CCND1/2593). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (Monoclonal Antibody) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a Monoclonal Antibody to its intended target. A Monoclonal Antibody is considered to be specific to its intended target, if the Monoclonal Antibody has an S-score of at least 2.5. For example, if a Monoclonal Antibody binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that Monoclonal Antibody to protein X is equal to 29.