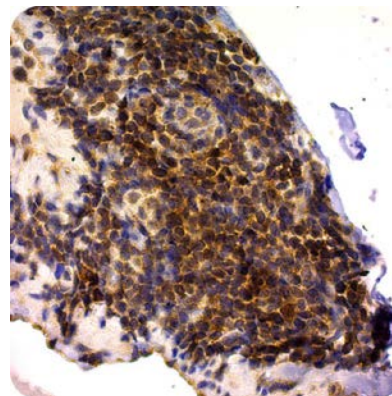


Cyclin D1; Clone DCS-6 (Concentrate)

Description:

| | |
|-------------------------|---|
| Species: | Mouse |
| Designation: | Mouse Monoclonal |
| Clone: | DCS-6 |
| Isotype: | IgG2a, Kappa |
| Concentration: | 100µg/ml |
| Immunogen: | Human recombinant full length Cyclin D1 protein was used as immunogen for this antibody. |
| Format: | This antibody is provided in a phosphate buffered saline containing 1% BSA. |
| Specificity: | The DCS-6 antibody is specific for cyclin D1, and has been key in elucidating the function and involvement of cyclin D1 in oncogenesis. Results with this antibody have helped to show that Cyclin D1 is over expressed in many different kinds of cancer. For example, about 50-70% of mantle cell lymphomas and 40% of breast carcinomas are cyclin D1. When staining normal tonsil, some cytoplasmic and membrane staining has been observed. |
| Background: | <p>Cyclin D1 is a member of a superfamily of cyclins, proteins that govern transitions through distinct phases of the cell cycle by regulating CDKs. The D-type subfamily includes cyclin D1, D2, and D3. All three are differentially, and sometimes redundantly, expressed in different lineages. However, in every cell type at least one of the three can be detected. Cyclin D1 as well as D2 and D3 have central roles in linking exogenous growth regulating stimuli with the cycling machinery of cells. They are typically considered to be G1 cyclins; synthesis is initiated during G1 and their expression drives the G1/S phase transition.</p> <p>The deregulation of cyclin D1 or other D types is commonly involved in a wide range of cancers. For example cyclin D1 is activated by chromosomal rearrangements in both parathyroid adenomas and B-cell neoplasms.</p> |
| Species Reactivity: | Human. |
| Positive Control: | Mantle cell lymphoma and breast carcinoma. |
| Cellular Localization: | Nuclear. |
| Titer/Working Dilution: | Immunohistochemistry: 1:50 – 1:100 Western Blot: 5-10µg/ml |
| Microbiological State: | This product is not sterile. |

Uses/Limitations: Not to be taken internally.
For Research Use Only.
This product is intended for qualitative immunohistochemistry with normal and neoplastic formalin-fixed, paraffin-embedded tissue sections, to be viewed by light microscopy.
Do not use if reagent becomes cloudy.
Do not use past expiration date.
Use caution when handling reagents.
Non-Sterile.



Human Mantle Cell Lymphoma (x400)

Procedure:

We suggest an incubation period of 30-60 minutes at room temperature or overnight at 2-8 C. Staining of formalin fixed, paraffin embedded tissue sections is significantly enhanced by pretreatment with citrate-based antigen retrieval. However, depending upon the fixation conditions and the staining system employed, optimal incubation should be determined by the user. For maximum staining intensity, we recommend using AviBond Ultra for detection and DAB Clarity Ultra products for visualization.

Precautions: Contains Sodium Azide as a preservative (0.09% w/v).
Do not pipette by mouth.
Avoid contact of reagents and specimens with skin and mucous membranes.
Avoid microbial contamination of reagents or increased nonspecific staining may occur.
This product contains no hazardous material at a reportable concentration according to U.S. 29 CFR 1910.1200, OSHA Hazardous Communication Standard and EC Directive 91/155/EC.

References:

1. Bartkova J., Lukas J., Strauss M., Bartek J. Cell cycle-related variation and tissue-restricted expression of human cyclin D1 protein. *J Pathology*, March; 172(3): pages 237-245 (1994).
2. Lukas J., Pagano M., Staskova Z., Draetta G., Bartek J. Cyclin D1 protein oscillates and is essential for cell cycle progression in human tumour cell lines. *Oncogene*, March; 9(3): pages 707-718 (1994).
3. Gillett C., Fantl V., Smith R., Fisher C., Bartek J., Dickson C., Barnes D., Peters G. Amplification and overexpression of cyclin D1 in breast cancer detected by immunohistochemical staining. *Cancer Research*, April 1;54(7): pages 1812-1817 (1994).
4. Bartkova J., Lukas J., Strauss M., Bartek J. Cyclin D1 oncoprotein aberrantly accumulates in malignancies of diverse histogenesis. *Oncogene*, 10: pages 775-778 (1995).

Warranty: No products or "Instructions For Use (IFU)" are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our IFU or website. Our warranty is limited to the actual price paid for the product. Teomics, LLC is not liable for any property damage, personal injury, time or effort or economic loss caused by our products. Immunohistochemistry is a complex technique involving both histological and immunological detection methods. Tissue processing and handling prior to immunostaining can cause inconsistent results. Variations in fixation and embedding or the inherent nature of the tissue specimen may cause variations in results. Endogenous peroxidase activity or pseudoperoxidase activity in erythrocytes and endogenous biotin may cause non-specific staining depending on detection system used.