

Instructions For Use 00111-IFU-RUO

Rev. Date: June 19, 2014

Revision: 2

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P.O. Box 3286 - Logan, Utah 84323, U.S.A. - Tel. (800) 729-8350 - Tel. (435) 755-9848 - Fax (435) 755-0015 - www.scytek.com

Cyclin D1; Clone DCS-6 (Ready-To-Use)

Availability/Contents: <u>Item #</u> <u>Volume</u>

 A00111-0002
 2 ml

 A00111-0007
 7 ml

 A00111-0025
 25 ml

Description:

Species: Mouse

Designation: Mouse Monoclonal

Clone: DCS-6

Isotype: IgG2a, Kappa

Immunogen: Human recombinant full length Cyclin D1 protein was used as immunogen for this antibody. Format: This antibody has been pretitered and quality controlled to work on formalin-fixed paraffin-

This antibody has been pretitered and quality controlled to work on formalin-fixed paraffinembedded as well as acetone fixed cryostat tissue sections. No further titration is required.

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: 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.

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.

Species Reactivity: Human.

Positive Control: Mantle cell lymphoma and breast carcinoma.

Cellular Localization: Nuclear.

Titer/Working Dilution: No further dilution is required. Microbiological State: This product is not sterile.

ScyTek Laboratories, Inc. 205 South 600 West Logan, UT 84321 U.S.A. ϵ



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Uses/Limitations: Not to be taken internally.

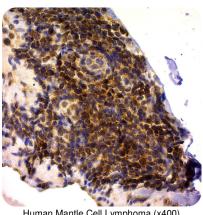
For Research Use Only.

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:

- Tissue Section Pretreatment is Suggested: Staining of formalin fixed, paraffin embedded tissue sections is 1. enhanced by pretreatment with Citrate Plus (ScyTek catalog# CPL500) or Citrate Buffer (10x), pH 6.0 (ScyTek Catalog# CBB500, see IFU for instructions).
- Primary Antibody Incubation Time: We suggest an incubation period of 30 minutes at room temperature. 2. However, depending upon the fixation conditions and the staining system employed, optimal incubation should be determined by the user.
- 3. Visualization: For maximum staining intensity we recommend the "UltraTek HRP Anti-Polyvalent Lab Pack" (ScvTek catalog# UHP125, see IFU for instructions) combined with the "DAB Chromogen/Substrate Bulk Pack (High Contrast)" (ScyTek catalog# ACV500, see IFU for instructions).

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:

- 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).
- 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).
- 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).
- 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:

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Storage: 2° C

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