MAb to Cyclin D1

Clone Determination: DCS-6

Category: Mouse monoclonal

Immunoglobulin Class: IgG2a

Purification: Hybridoma culture supernatant

Antigen: Human recombinant full-length cyclin D1 protein

Description/Specificity: DCS-6 reacts specifically with cyclin D1 protein present predominantly in G1 phase of cell cycle; it does not cross-react with D2 or D3 cyclins (the closest relatives within the cyclin family); DCS-6 is especially useful in tumor diagnosis: it can be used as fast method to identify cases with 11q13 amplifications. Cyclin D1 gene is identical to the BCL-1 and the PRAD-1 oncogene and is part of the chromosome 11q13 amplicon which is amplified in several common tumor types like breast, lung, esophagus, urinary bladder and head and neck carcinoma. Polypeptide reacting: Mr 36 000 polypeptide (cyclin D1 polypeptide of human cells)

Reactivities on Cultured Cell Lines (tested so far): MCF-7, MDA-MB-134 (breast cancer cell lines), UMSC22 (squamous cell carcinoma cell line), U-2-OS (osteosarcoma cell line) RT 112, A 431, HT 29 (for additional cell lines and their reaction patterns see ref. 1)

Antigen Recognized in Species (tested so far): Human, monkey, rat, mouse, dog, rodents

Application:
- Immunostaining of frozen and paraffin-embedded tissue and culture cells
  a) Paraffin without microwave treatment only after fixation in methacarn, ethanol or phenol formalin; weak reaction using routine formol-fixed paraffin sections
  b) Paraffin with microwave treatment for routine formalin-fixation
- Immunoblotting (Western blot)
- Immunoprecipitation
- Microinjection/in vitro neutralization of cyclin D1 function
- Flow cytometry

Working Dilution: Ready-to-use for immunohistochemical application

Storage: Store at 2-8°C

Incubation Time: 1 h at RT or overnight at 2-8°C for paraffin sections

Quantity: 5 mL

References:


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