Human Cyclin D1
close DCS-6
Cat. no. MONX10268

Specificity
The D-type cyclins are a family of proteins which function primarily by regulating the activity of cyclin dependent protein kinases in the G1 phase of the cell cycle. Cyclin D1, also known as (PRAD-1 or bcl-1) is a 36kD protein. Maximum expression of cyclin D1 occurs at a critical point in mid to late G1 phase of the cell cycle. The cyclin D1 gene, located on 11q13 has been shown to be amplified in a variety of tumours including 30 per cent of breast cancers and bladder tumours. The cyclin D1 gene is also translocated and expressed in approximately 50 to 70 per cent of mantle cell lymphomas.
This antibody also reacts with monkey, rat and mouse cyclin D1. Other species are not tested.

Immunoglobulin type
Murine IgG2a

Use
The antibody can be used for immunohistochemistry, frozen and paraffin sections. It can also used for Western blotting.

Instructions for use
Immunohistochemistry:
Typical working dilution 1:20.
High temperature antigen unmasking technique or trypsin digestion of sections is required.
The choice of antigen unmasking technique should be determined by the individual laboratory.
60 minutes primary antibody incubation at 25°C.
Standard ABC technique.

Western blotting:
Typical working dilution 1:100 - 1:250.

Staining pattern: Nuclear, however cytoplasmic staining may also be seen, especially in formalin-fixed tissues.
Antigen used for immunizations: Prokaryotic recombinant fusion protein corresponding to the human cyclin D1 molecule.

Positive control
Formalin-fixed, paraffin-embedded cells WI-38 cells (diploid human fibroblast cell line) will stain positively. In addition, approximately 30 per cent of human breast cancers will stain positively.

Presentation
Lyophilised tissue culture supernatant containing 15mM sodium azide.
Reconstitute with 1ml or 0.1ml of sterile distilled water as indicated on vial label.
Literature

Storage and Handling
Store unopened lyophilised antibody at 4°C. Under these conditions, there is no significant loss in product performance up to the expiry date indicated on the vial label. The reconstituted antibody is stable for at least two months when stored at 4°C. For long term storage, it is recommended that aliquots of the antibody are frozen at -20°C (frost-free freezers are not recommended). Repeated freezing and thawing must be avoided. Prepare working dilutions on the day of use.

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