

Product Data Sheet: Cyclin D1

Cat. No: MAB-80044

Size: 100 ug
Clone: CD1.1
Concentration: 1mg/ml

Host: Ms lgG1

Immunogen: Purified cyclin D1 protein

Reactivity: Hu

Applications:

Background:

Flow Cytometry

Application note: Membrane permeabilization is required. Immunoprecipitation: Recommended dilution: 1 μ g/ml Western Blotting Recommended dilution: 1 μ g/ml Immunohistochemistry (paraffin sections): Recommended dilution: 2 μ g/ml

Positive tissue: colon

Pretreatment: Heat treatment, sodium citrate buffer pH 6.0. Immunohistochemistry

(frozen sections)

Immunocytochemistry: Recommended dilution: 1 µg/ml

ELISA

Purification: Purified from ascites by protein-A affinity chromatography.

Cyclin D1 (PRAD1, Bcl-1) is a cytoplasmic and nuclear protein, which is synthesized during G1 phase and assembles with either cyclin-dependent kinase 4 (CDK4) or CDK6 in response to growth factor stimulation. D-type cyclin-CDK complexes act to

inactivate the growth-suppressive function of the Rb protein through its

phosphorylation, and titrate CDK inhibitors such as p21Cip1 and p27Kip1. Whereas during G1 phase cyclin D1 accumulates in the nucleus, it translocates into the cytoplasm during S phase. Without growth factor-mediated stimulation cyclin D1 is

unstable, and undergoes ubiquitin-mediated degradation, which is triggered by its phosphorylation. Cyclin D1 destabilization participates in G1/S phase arrest. The antibody CD1.1 recognizes cyclin D1, an ubiquitously expressed 33 kDa protein that

migrates as a 36 kDa band under reducing SDS-PAGE condition

Form: Liquid

Buffer: Stabilizing phosphate buffered saline (PBS) solution containing 15 mM sodium azide.

Storage: Store at 2-8oC. Do not use after expiration date stamped on vial label. For long-term

storage aliquot and store at -20oC. Avoid freeze/thaw cycles.