

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Cyclin D1 in direct ELISAs.
Source	Monoclonal Mouse IgG ₁ Clone # 328303
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Cyclin D1 Met1-Ile295 Accession # P24385
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

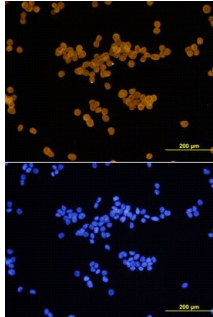
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Immunocytochemistry	8-25 µg/mL	See Below
Immunohistochemistry	8-25 µg/mL	Immersion fixed paraffin-embedded sections of human heart

DATA

Immunocytochemistry



Cyclin D1 in COLO 205 Human Cell Line. Cyclin D1 was detected in immersion fixed COLO 205 human colorectal adenocarcinoma cell line using Mouse Anti-Human Cyclin D1 Monoclonal Antibody (Catalog # MAB4314) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (yellow, upper panel; Catalog # NL007) and counterstained with DAPI (blue, lower panel). View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Cyclin D1 is a 44 kDa cell cycle regulatory protein whose expression level and nuclear/cytoplasmic distribution are tightly regulated in synchrony with the cell cycle. Cyclin D1 complexes containing Cdk4 or Cdk6 induce phosphorylation of Rb, a requirement for progression through the G1/S cell cycle transition. Human Cyclin D1 shares 93% amino acid sequence identity with mouse and rat Cyclin D1.