



Mouse anti-Human Cyclins D1, D2, D3 monoclonal antibody, clone H235-360 (CABT-B9191)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Immunogen	Recombinant Human Cyclin D1, expressed in the Baculovirus Expression System (BEVS)
Isotype	IgG1
Source/Host	Mouse
Species Reactivity	Human
Clone	H235-360
Purification	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Conjugate	Unconjugated
Applications	WB; FC; IP
Format	Liquid
Concentration	0.5 mg/ml
Size	100 µg
Buffer	Aqueous buffered solution containing ≤0.09% sodium azide.
Storage	Store undiluted at 4°C.

BACKGROUND

Introduction

Cyclins and cyclin-dependent kinases (cdks) are evolutionary conserved proteins that are essential for cell-cycle control in eukaryotes. Cyclins (regulatory subunits) bind to cdk5 (catalytic subunits) to form complexes that regulate the progression of the cell cycle. The main cyclin-cdk5 complexes formed in vertebrate cells are cyclin D-cdk4 (G0/G1), cyclin E-cdk2 (G1/S), cyclin A-cdk2 (S) and cyclin B1-cdk1 (G2/M). These complexes are regulated by activating and inhibitory phosphorylation events as well as by interactions with small proteins that bind to cyclins, cdk5, or cyclin-cdk complexes, e.g., p21 and p27[Kip1]. Specific substrates for cdk-cyclin complexes include nuclear lamins, histones, oncogenes (c-src, c-abl, SV40 large T-Ag), tumor suppressor genes (e.g., retinoblastoma protein [Rb] and p53), nucleolin, RNA polymerase II and others. It is thought that D-type cyclins are involved in regulating the passage of mammalian cells through G1. The reduced molecular weights of D-type cyclins are as follows: cyclins are D1 (36 kDa), cyclin D2 (35 kDa) and cyclin D3 [31 and 34 kDa (doublet)]. G124-259 recognizes human cyclins D1 (36 kDa), D2 (35 kDa), and D3 (31 and 33 kDa). Recombinant full-length human cyclin D1, expressed in the Baculovirus Expression System (BEVS), was used as immunogen. Hybridomas were selected by ELISA and western blot reactivity. G124-259 was selected, as it reacted with D1, D2, and D3, apparently recognizing a common epitope among these three cyclin D proteins.

Keywords

CCND1; cyclin D1; BCL1; PRAD1; U21B31; D11S287E; G1/S-specific cyclin-D1; BCL-1 oncogene; PRAD1 oncogene; B-cell CLL/lymphoma 1; B-cell lymphoma 1 protein;