

## Product datasheet

# Anti-Cyclin D1 antibody [CD1.1] ab6152

★★★★☆ 7 Abreviews 23 References 画像数 4

### 製品の概要

<b>製品名</b>	Anti-Cyclin D1 antibody [CD1.1]
<b>製品の詳細</b>	Mouse monoclonal [CD1.1] to Cyclin D1
<b>由来種</b>	Mouse
<b>特異性</b>	The antibody CD1.1 recognizes cyclin D1, an ubiquitously expressed 33 kDa protein that migrates as a 36 kDa band under reducing SDS-PAGE conditions. The immunogen used for this product shares 64% homology with CCND2. Cross-reactivity with this protein has not been confirmed experimentally.
<b>アプリケーション</b>	<b>適用あり:</b> IHC-P, IHC-Fr, Flow Cyt, WB, IP, ELISA, ICC
<b>種交差性</b>	<b>交差種:</b> Mouse, Rat, Human <b>交差が予測される動物種:</b> Chicken, Cow, Dog, Orangutan
<b>免疫原</b>	Full length protein corresponding to Cyclin D1. Purified cyclin D1 protein. Sequence: MEHQLLCCEVETIRRAYPDANLLNDRVLRAMLKAEETCAPSVSYFKCVQK EVLPSMRKIV ATWMLEVCEEQKCEEEVFPLAMNYLDRFLSLEPVKKSR LQLLGATCMFVASKMKETIPLT AEKLCIYTDNSIRPEELLQMELLLVN KWKWNLAAAMTPHDFIEHFLSKMPEAEENKQIIRK HAQTFVALCATDVK FISNPPSMVAAGSVAAVQGLNLRSPNNFLSYRRLTRFLSRVIKCD PD CLRACQEIEALLESSLRQAQQNMDPKAAEEEEEEEEVLDLACTPTDVRD VDI  Database link: <a href="#">P24385</a>  <a href="#">Run BLAST with</a> <a href="#">Run BLAST with</a>
<b>ポジティブ・コントロール</b>	Small intestine, colon

### 製品の特性

<b>製品の状態</b>	Liquid
<b>保存方法</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term.

バッファー	pH: 7.4 Preservative: 0.1% Sodium azide Constituent: 99% PBS
精製度	Protein A purified
特記事項(精製)	Purified from ascites by protein-A affinity chromatography. Purity > 95% (by SDS-PAGE).
ポリモノ	モノクローナル
クローン名	CD1.1
ミエローマ	Sp2
アイソタイプ	IgG1

## アプリケーション

Our [Abpromise guarantee](#) covers the use of **ab6152** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

アプリケーション	Abreviews	特記事項
IHC-P		1/1000 - 1/10000. We recommend antigen retrieval with sodium citrate buffer (10mM Sodium Citrate, 0.05% Tween 20, pH 6.0) before IHC staining.
IHC-Fr	★★★★☆	Use a concentration of 2 µg/ml.
Flow Cyt	★★★★★	Use at an assay dependent concentration. Membrane permeabilization is required. <a href="#">ab170190</a> - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.
WB	★★★★☆	1/500. Detects a band of approximately 36 kDa (predicted molecular weight: 33 kDa).
IP		Use a concentration of 1 µg/ml.
ELISA		Use at an assay dependent concentration.
ICC		Use a concentration of 1 µg/ml.

## ターゲット情報

機能	Essential for the control of the cell cycle at the G1/S (start) transition.
関連疾患	Note=A chromosomal aberration involving CCND1 may be a cause of B-lymphocytic malignancy, particularly mantle-cell lymphoma (MCL). Translocation t(11;14)(q13;q32) with immunoglobulin gene regions. Activation of CCND1 may be oncogenic by directly altering progression through the cell cycle. Note=A chromosomal aberration involving CCND1 may be a cause of parathyroid adenomas. Translocation t(11;11)(q13;p15) with the parathyroid hormone (PTH) enhancer. Defects in CCND1 are a cause of multiple myeloma (MM) [MIM:254500]. MM is a malignant tumor of plasma cells usually arising in the bone marrow and characterized by diffuse

involvement of the skeletal system, hyperglobulinemia, Bence-Jones proteinuria and anemia. Complications of multiple myeloma are bone pain, hypercalcemia, renal failure and spinal cord compression. The aberrant antibodies that are produced lead to impaired humoral immunity and patients have a high prevalence of infection. Amyloidosis may develop in some patients. Multiple myeloma is part of a spectrum of diseases ranging from monoclonal gammopathy of unknown significance (MGUS) to plasma cell leukemia. Note=A chromosomal aberration involving CCND1 is found in multiple myeloma. Translocation t(11;14)(q13;q32) with the IgH locus.

#### 配列類似性

Belongs to the cyclin family. Cyclin D subfamily.

#### 翻訳後修飾

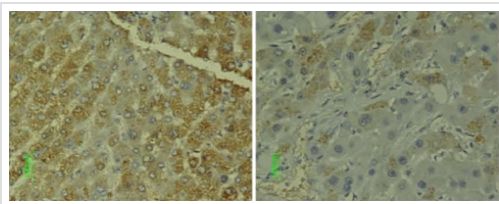
Phosphorylation at Thr-286 by MAP kinases is required for ubiquitination and degradation following DNA damage. It probably plays an essential role for recognition by the FBXO31 component of SCF (SKP1-cullin-F-box) protein ligase complex.

Ubiquitinated, primarily as 'Lys-48'-linked polyubiquitination. Ubiquitinated by a SCF (SKP1-CUL1-F-box protein) ubiquitin-protein ligase complex containing FBXO4 and CRYAB (By similarity). Following DNA damage it is ubiquitinated by some SCF (SKP1-cullin-F-box) protein ligase complex containing FBXO31. Ubiquitination leads to its degradation and G1 arrest. Deubiquitinated by USP2; leading to stabilize it.

#### 細胞内局在

Nucleus.

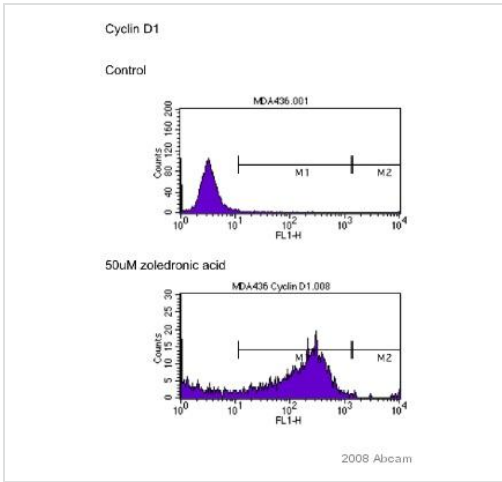
#### 画像



Immunohistochemistry (Frozen sections) - Anti-Cyclin D1 antibody [CD1.1] (ab6152)

Image from Wei W et al., *Mol Cancer*. 2009 Sep 24;8:76. Fig 4.; doi:10.1186/1476-4598-8-76; 24 September 2009, *Molecular Cancer* 2009, 8:76

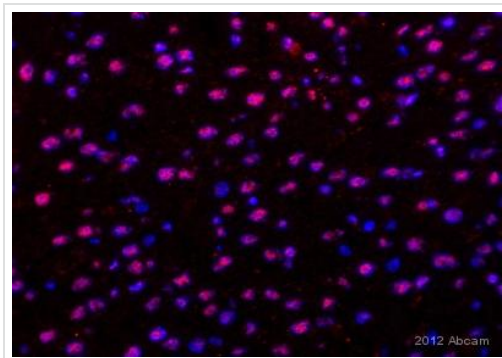
Immunohistochemical analysis of Huh7 tumour xenografts grown in mice treated with either control (left) or anti-Wnt1 antibody (right), staining Cyclin D1 with ab6152. Sections were fixed in acetone before incubation with primary antibody (1/250). Staining was detected using HRP.



Flow Cytometry - Anti-Cyclin D1 antibody [CD1.1] (ab6152)

This image is courtesy of an abreview submitted by Penelope Ottewell, University of Sheffield.

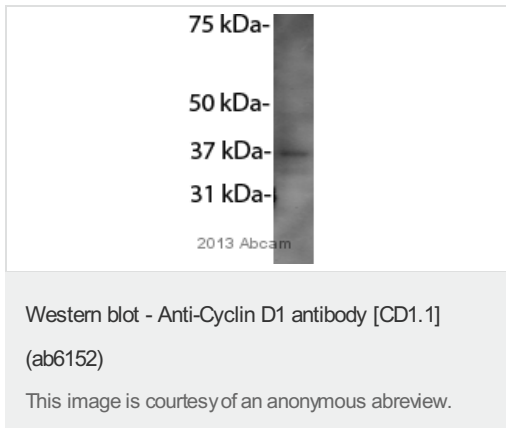
Flow Cytometry analysis of human Breast cancer (MDA-MB-436) cells labeling Cyclin D1 with ab6152 at 1/50 dilution. Sub-confluent cells were harvested via trypsinisation with trypsin/EDTA in 1x PBS with 5% FCS. Live (non apoptotic cells) were selected as the gating strategy. A polyclonal horse anti-mouse IgG FITC conjugated secondary antibody was used at 1/200 dilution.



Immunohistochemistry (Frozen sections) - Anti-Cyclin D1 antibody [CD1.1] (ab6152)

This image is courtesy of an anonymous abreview.

Immunohistochemistry (Frozen sections) analysis of rat liver tissue sections labeling Cyclin D1 with ab6152 at 1/200 dilution. Tissue sections were fixed with acetone and blocked with 10% serum for 1 hour at 21°C. A polyclonal Goat anti-mouse Alexa Fluor® 594 was used as the secondary antibody at 1/1000 dilution.



Anti-Cyclin D1 antibody [CD1.1] (ab6152) at 1/500 dilution + Human Fibroblast whole cell lysate at 15 µg

#### Secondary

Polyclonal Sheep anti-mouse IgG IRDye® 800CW at 1/5000 dilution

Performed under reducing conditions.

**Predicted band size:** 33 kDa

**Observed band size:** 37 kDa

**Additional bands at:** 34 kDa (possible non-specific binding)

**Exposure time:** 1 minute

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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