

Product datasheet

Human Cyclin D1 Matched Antibody Pair Kit ab218793

Recombinant

1 References 2 Images

Overview

Product name	Human Cyclin D1 Matched Antibody Pair Kit
Detection method	Colorimetric
Assay type	ELISA set
Sensitivity	48.79 pg/ml
Range	125 pg/ml - 8000 pg/ml
Species reactivity	Reacts with: Human
Product overview	<p>Human Cyclin D1 Matched Antibody Pair Kits include a capture and a biotinylated detector antibody pair, along with a calibrated protein standard, suitable for sandwich ELISA. The Matched Antibody Pair Kit can be used to quantify native and recombinant human Cyclin D1.</p> <p>Optimization of the kit reagents to sample type, immunoassay format or instrumentation may be required. Guidelines for use of this kit in a standard 96-well microplate sandwich ELISA using HRP/TMB system of colorimetric detection is described in this assay procedure for the purposes of quantification.</p> <p>Protocol information and tips on the use of the Matched Antibody Pair kits for sandwich ELISA can be found on our website. An accessory pack can be purchased which includes buffer reagents required to perform 10 x 96-well plate sandwich ELISAs (ab210905).</p> <p>For additional information on the performance of the antibody pair used in this kit, please see our equivalent SimpleStep ELISA kit ab214571. Please note that while the antibody pair is the same provided in the corresponding SimpleStep ELISA Kit, due to differences in their formulation, this antibody pair cannot be used with the consumables provided with our SimpleStep ELISA Kits.</p>
Tested applications	Suitable for: ELISA
Platform	Reagents

Properties

Storage instructions Store at -20°C. Please refer to protocols.

Components	5 x 96 tests
Human Cyclin D1 Capture Antibody	1 x 50µg
Human Cyclin D1 Detector Antibody	1 x 12.5µg
Human Cyclin D1 Lyophilized Protein	1 vial

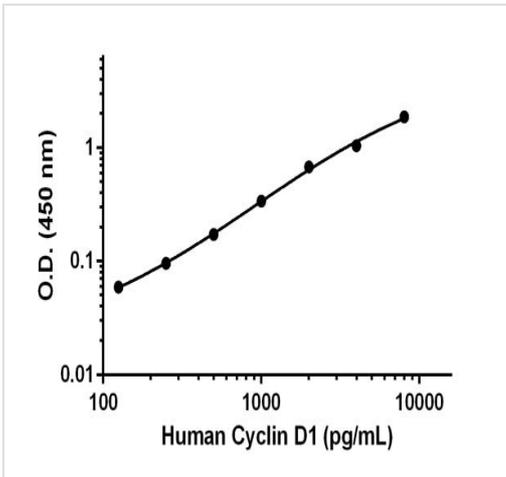
Function	Essential for the control of the cell cycle at the G1/S (start) transition.
Involvement in disease	<p>Note=A chromosomal aberration involving CCND1 may be a cause of B-lymphocytic malignancy, particularly mantle-cell lymphoma (MCL). Translocation t(11;14)(q13;q32) with immunoglobulin gene regions. Activation of CCND1 may be oncogenic by directly altering progression through the cell cycle.</p> <p>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.</p> <p>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.</p>
Sequence similarities	Belongs to the cyclin family. Cyclin D subfamily.
Post-translational modifications	<p>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.</p> <p>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.</p>
Cellular localization	Nucleus.

Applications

The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab218793 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ELISA		Use at an assay dependent concentration.

Images



Standard calibration curve. Background subtracted values are graphed.

Human Cyclin D1 standard curve

Powered by recombinant antibodies

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

To learn more about the advantages of recombinant antibodies see [here](#).

Sandwich ELISA - Human Cyclin D1 Matched Antibody Pair Kit (ab218793)

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