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# Recombinant Human CCND1 Protein(Trx Tag)

Catalog Number: PDEH101117

Note: Centrifuge before opening to ensure complete recovery of vial contents.

#### **Description**

Species Human

Source E.coli-derived Human CCND1 protein Val193-Ile295, with an N-terminal Trx

Calculated MW 31.2 kDa
Observed MW 32 kDa
Accession P24385

**Bio-activity** Not validated for activity

# **Properties**

**Purity** > 95% as determined by reducing SDS-PAGE.

**Endotoxin** < 10 EU/mg of the protein as determined by the LAL method

Storage Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80

°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of

reconstituted samples are stable at < -20°C for 3 months.

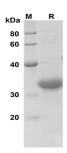
Shipping This product is provided as lyophilized powder which is shipped with ice packs.
 Formulation Lyophilized from a 0.2 μm filtered solution in PBS with 5% Trehalose and 5%

Mannitol.

**Reconstitution** It is recommended that sterile water be added to the vial to prepare a stock solution of

0.5 mg/mL. Concentration is measured by UV-Vis.

#### Data



SDS-PAGE analysis of Human CCND1 proteins, 2µg/lane of Recombinant Human CCND1 proteins was resolved with SDS-PAGE under reducing conditions, showing bands at 32 kDa

# Background

# For Research Use Only

# Elabscience®

#### Elabscience Bionovation Inc.

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Regulatory component of the cyclin D1-CDK4 (DC) complex that phosphorylates and inhibits members of the retinoblastoma (RB) protein family including RB1 and regulates the cell-cycle during G1/S transition. Phosphorylation of RB1 allows dissociation of the transcription factor E2F from the RB/E2F complex and the subsequent transcription of E2F target genes which are responsible for the progression through the G1 phase. Hypophosphorylates RB1 in early G1 phase. Cyclin D-CDK4 complexes are major integrators of various mitogenenic and antimitogenic signals. Also a substrate for SMAD3, phosphorylating SMAD3 in a cell-cycle-dependent manner and repressing its transcriptional activity. Component of the ternary complex, cyclin D1/CDK4/CDKN1B, required for nuclear translocation and activity of the cyclin D-CDK4 complex. Exhibits transcriptional corepressor activity with INSM1 on the NEUROD1 and INS promoters in a cell cycle-independent manner.

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