

## **Product datasheet for TA354668**

### OriGene Technologies, Inc.

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#### **CDK1 Rabbit Polyclonal Antibody**

#### **Product data:**

**Product Type:** Primary Antibodies

**Applications:** Dot, WB

Recommended Dilution: WB 0.1-1 μg/ml ELISA 0.01-0.1 μg/ml IP 2-5 μg/ml IHC 2-10 μg/ml FC 5-10 μg/ml

Reactivity: Human, Chicken, Bovine

Host: Rabbit Isotype: IgG

Clonality: Polyclonal

**Immunogen:** A synthetic peptide surrounding to the epitope -GTYGV- without a phosphorylation site at

Tyr15 of human CDC2 protein. This sequence is identical among human, mouse, rat, bovine

and chicken species.

Formulation: This affinity purified antibody is supplied in sterile Tris-buffered saline (pH7.2) containing

antibody stabilizer.

**Purification:** The Rabbit IgG is purified by Epitope Affinity Purification

Conjugation: Unconjugated

**Storage:** Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

Predicted Protein Size: 38 kDa

**Gene Name:** cyclin-dependent kinase 1

Database Link: NP 001124301

Entrez Gene 983 Human

P06493



Background: Cyclins and cyclin-dependent kinases (CDKs) control cell cycle progression by phosphorlating

regulatory proteins. These cyclin-related proteins appear to affect cell structure and function independent of the cell cycle. Cyclins and CDKs have a role in the development and

maintenance of cell- and tissue-restricted properties of differentiated cells. CDC2 (Cell Division Cycle 2), also known as CDK1 (Cyclin Dependent kinase 1), is a member of the CDK family of serine/threonin kinases. It is a highly conserved serine protein kinase that plays a key role in regulation of the cell cycle. The phosphorylation of CDC2 at Y15 and T14 during the G2 phase of the cell cycle inhibits CDC2 activity, while the dephosphorylation of Y15 and T14

by CDC25 phosphatase during the late G2 restores its activity.

Synonyms: CDC28A; CDK1; DKFZp686L20222; MGC111195

**Protein Families:** Druggable Genome, Protein Kinase, Stem cell - Pluripotency

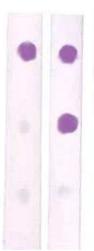
**Protein Pathways:** Cell cycle, Gap junction, Oocyte meiosis, p53 signaling pathway, Progesterone-mediated

oocyte maturation

# **Product images:**



WB: The A431 cell lysate resolved onto 12% SDS-PAGE, transferred onto NC membrane, and followed by an immunoblotting with Rabbit anti-CDC2 (paired Y15) antibody (Lane 1) at 1:500, or with a pre-incubation of immunizing peptide (lane 2)



DB: 1 ug peptide was blot onto NC membrane A: CDC2 (pY15) (Phosphospecific) B: CDC2 (Paired Y15) (Non phosphospeicfic) C: Non-related phosphospecific peptide were blotted at a 1:2000 dilution by: 1: Rabbit anti-CDC2 (pY15) (Phosphospecific), 2: Rabbit anti-CDC2 (Paired Y15) (NonPhospho specific).