

Rabbit anti CDC2 (pY15) (CDK1) Polyclonal Antibody

Alternative Name(s): Cyclin-Dependent Kinase 1; CDK1

Order Information

• Description: CDC2 (pY15) (CDK1)

Catalogue: 602-160Lot: See labelSize: 100ug/200ulHost: RabbitClone: nan

• Application: IHC(P), WB • Reactivity: Hu, Ck, Bv

ANTIGEN PREPARATION

A synthetic peptide surrounding to the epitope -GTYGV- with a phosphorylation site at Tyr15 of human CDC2 protein. This sequence is identical among human, mouse, rat, bovine and chicken species.

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.

PURIFICATION

The Rabbit IgG is purified by site-modified Epitope Affinity Purification.

FORMULATION

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

SPECIFICITY

This antibody recognizes CDC2 (pY15) with a phosphorylated site at Tyrosine 15. It does not cross-react with non-phosphospecific peptide.

STORAGE

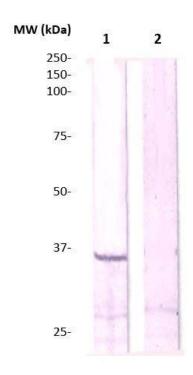
The antibodies are stable for 24 months from date of receipt when stored at -20oC to -70oC. The antibodies can be stored at 20C-8oC for three month without detectable loss of activity. Avoid repeated freezing-thawing cycles.

APPLICATIONS/SUGGESTED WORKING DILUTIONS*

- Western Blot: 0.1-1 μg/ml
- ELISA: 0.01-0.1 µg/ml
- Immunoprecipitation: 2-5 µg/ml
- IHC: 2-10 µg/ml
- Flow cytometry: Not tested
- Molecular Weight: 32.0
- Positive Control: Kidney Tissue
- Cellular Location: Cell Membrane

^{*}Optimal dilutions should be determined by researchers for the specific applications.





Western Blot: The A431 cell lysate resolved onto 12% SDS-PAGE, transferred onto NC membrane, and followed by immunoblotting with Rabbit anti CDC2 (pY15) antibody (Cat#602-160) (Lane 1) at 1:500, or with a pre-incubation of immunizing peptide (lane 2). Observed a major immunoreactive band at molecular weight ~38kDa.

REFERENCES