

AbboMax, Inc

Innovation at Work

Rabbit anti-Phospho- CDC2 (pTyr¹⁵)

Synonym: Cell division control protein 2 (CDC2);

Cell division protein kinase 2 (CDK2), CDK1, CDK3, MGC11195, CDC28A

Order Information

Description: Rabbit anti Phospho-CDC2(pY15)

Catalogue#: 602-160

Lot#: See the label

Size: 100 ug/200 ul

Host: Rabbit

Clone: N/A

Application: ELISA, WB, IHC

Reactivity: Hu, Rt, Ms, Bv, Ck,

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 phosphorylating 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/threonine 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 12 months from date of receipt when stored at -20°C to -70°C. The antibodies can be stored at 2°C-8°C for three month without detectable loss of activity. Avoid repeated freezing-thawing cycles.

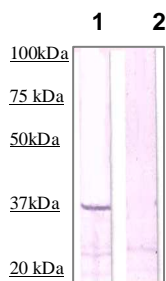
APPLICATIONS/SUGGESTED WORKING DILUTIONS

Western Blot	0.1-1 µg/ml
ELISA	0.01-0.1 µg/ml
Immunoprecipitation	2-5 µg/ml
IHC	1:200
Flow cytometry	Not tested

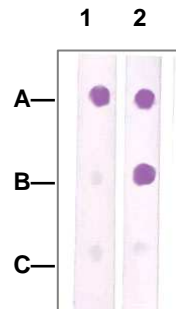
MOLECULAR WEIGHT:	38 kDa
POSITIVE CONTROL:	A431 cell lysate
CELLULAR LOCATION:	Nuclear

Optimal dilutions should be determined by researchers for the specific applications.

DATA ATTACHMENTS



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



Dot Blot:

1 µg peptide was blot onto NC membrane

A: CDC2 (pY15) (Phosphospecific)

B: CDC2 (Paired Y15) (Non phosphospecific)

C: Non-related phosphospecific peptide were blotted at a 1:2000 dilution by:

1: Rabbit anti-CDC2 (pY15)

(Phosphospecific) (Cat#602-160),

2: Rabbit anti-CDC2 (Paired Y15) (Non-Phospho specific) (Cat#602-170).

REFERENCES

Shirwin M. Pockwinse, et al. Cell cycle independent interaction of CDC2 with the centrosome, which is associated with the nuclear matrix-intermediate filament scaffold. Proc Natl Acad Sci U S A. 1997 April 1; 94(7): 3022-3027.

FOR RESEARCH USE ONLY.