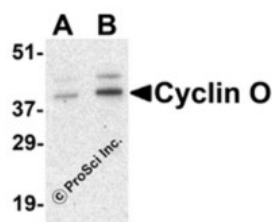




## Cyclin O Antibody

CATALOG NUMBER: 3861



Western blot analysis of Cyclin O in human bladder tissue lysate with Cyclin O antibody at (A) 1 and (B) 2 ug/mL.

### Specifications

<b>SPECIES REACTIVITY:</b>	Human, Mouse, Rat
<b>TESTED APPLICATIONS:</b>	ELISA, WB
<b>APPLICATIONS:</b>	Cyclin O antibody can be used for the detection of Cyclin O by Western blot at 1 - 2 ug/mL.
<b>USER NOTE:</b>	Optimal dilutions for each application to be determined by the researcher.
<b>POSITIVE CONTROL:</b>	1) Cat. No. 1310 - Human Bladder Tissue Lysate
<b>PREDICTED MOLECULAR WEIGHT:</b>	39 kDa
<b>SPECIFICITY:</b>	At least two isoforms of Cyclin O are known to exist; this antibody will recognize both isoforms.
<b>IMMUNOGEN:</b>	Cyclin O antibody was raised against a 13 amino acid synthetic peptide from near the center of human Cyclin O.  The immunogen is located within amino acids 90 - 140 of Cyclin O.
<b>HOST SPECIES:</b>	Rabbit

### Properties

<b>PURIFICATION:</b>	Cyclin O Antibody is affinity chromatography purified via peptide column.
<b>PHYSICAL STATE:</b>	Liquid
<b>BUFFER:</b>	Cyclin O Antibody is supplied in PBS containing 0.02% sodium azide.
<b>CONCENTRATION:</b>	1 mg/mL
<b>STORAGE CONDITIONS:</b>	Cyclin O antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
<b>CLONALITY:</b>	Polyclonal
<b>ISOTYPE:</b>	IgG
<b>CONJUGATE:</b>	Unconjugated

### Additional Info

<b>ALTERNATE NAMES:</b>	Cyclin O Antibody: CCNU, UDG2, Cyclin-O
<b>ACCESSION NO.:</b>	NP_066970
<b>PROTEIN GI NO.:</b>	153791755
<b>OFFICIAL SYMBOL:</b>	CCNO
<b>GENE ID:</b>	10309

## Background

**BACKGROUND:** Cyclin O Antibody: Cyclin O, also known as CCNO, has recently been identified as a Cdk1- and Cdk2-activating cyclin specific to apoptosis in lymphoid cells. Cyclin O binds to and activates Cdk2 in response to intrinsic apoptotic stimuli such as glucocorticoids or DNA-damaging agents. Suppression of Cyclin O expression by shRNA leads to the inhibition of glucocorticoid and DNA-damage-induced apoptosis due to a failure of apical caspase activation while leaving the CD95 death receptor-mediated apoptosis intact. Note: this gene, which had a previous symbol of UNG2, was erroneously identified as a uracil DNA glycosylase. A later publication identified this gene's product as a cyclin protein family member.

**REFERENCES:**

- 1) Roig MB, Roset R, Ortet L, et al. Identification of a novel cyclin required for the intrinsic apoptosis pathway in lymphoid cells. *Cell Death Diff.* 2009; 16:230-43.
- 2) Muller SJ and Caradonna S. Isolation and characterization of a human cDNA encoding uracil-DNA glycosylase. *Biochim. Biophys. Acta* 1991; 1088:197-207.
- 3) Muller SJ and Caradonna S. Cell cycle regulation of a human cyclin-like gene encoding uracil-DNA glycosylase. *J. Biol. Chem.* 1993; 268:1310-9.

**FOR RESEARCH USE ONLY**

December 12, 2016