

# Cyclin O Antibody

Catalog # ASC10435

### Specification

# Cyclin O Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW Application Notes WB, E <u>P22674</u> <u>NP\_066970</u>, <u>153791755</u> Human, Mouse, Rat Rabbit Polyclonal IgG 39 kDa KDa Cyclin O antibody can be used for the detection of Cyclin O by Western blot at 1 -2 μg/mL.

# Cyclin O Antibody - Additional Information

Gene ID 10309 Other Names Cyclin O Antibody: CCNU, UDG2, Cyclin-O, Cyclin O

**Target/Specificity** 

CCNO; At least two isoforms of Cyclin O are known to exist; this antibody will recognize both isoforms.

#### **Reconstitution & Storage**

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.

**Precautions** Cyclin O Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# Cyclin O Antibody - Protein Information

#### Name CCNO (HGNC:18576)

Function

Specifically required for generation of multiciliated cells, possibly by promoting a cell cycle state compatible with centriole amplification and maturation. Acts downstream of MCIDAS to promote mother centriole amplification and maturation in preparation for apical docking.

Cellular Location

Cytoplasm. Nucleus, nucleolus Note=Localizes to the apical part of cytoplasm

**Tissue Location** 



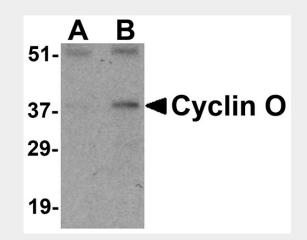
Present in respiratory cells (at protein level).

# Cyclin O Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

#### Cyclin O Antibody - Images



Western blot analysis of Cyclin O in mouse bladder tissue lysate with Cyclin O antibody at (A) 1 and (B) 2  $\mu$ g/mL.

# Cyclin O Antibody - 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 instrinsic apoptotic stimuli such as glucocorticoids or DNA-damaging agents. Supression 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.

# Cyclin O Antibody - References

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.

Muller SJ and Caradonna S. Isolation and characterization of a human cDNA encoding uracil-DNA glycosylase. Biochim. Biophys. Acta 1991; 1088:197-207.

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