

Cyclin O Antibody

Catalog # ASC10435

Product Information

Application	WB, E
Primary Accession	P22674
Other Accession	NP_066970 , 153791755
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	38096
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	Cyclin O antibody can be used for the detection of Cyclin O by Western blot at 1 - 2 µg/mL.

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.

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).

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.

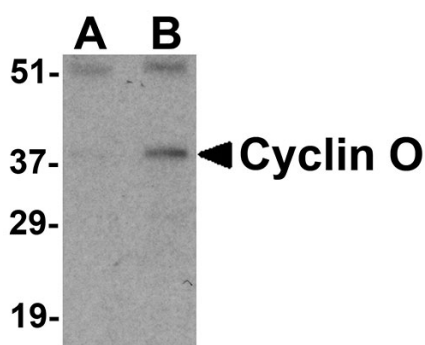
References

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

Images



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.