

UNG2 (IN) antibody (pAb)

Rabbit Anti-Human/Mouse/Rat Uracil-DNA Glycosylase 2 (UDG2)

Instruction Manual

Catalog Number	PK-AB718-3861
Synonyms	Cyclin O Antibody: Cyclin-O, CCNO
Description	The human uracil-DNA glycosylase (UNG) gene encodes both mitochondrial (UNG1) and nuclear (UNG2) forms through differentially regulated promoters and alternative splicing. UNG2 is the major enzyme in the base excision repair pathway that removes uracil residues from DNA that arise through either misincorporation during replication or cytosine deamination. UNG2 can also be bound by the HIV-1 integrase and incorporated into the virion particle, suggesting that it is required to remove uracils from the viral genome. As the intrinsic antiviral protein APOBEC3G generates numerous uracils in the HIV genome during its replication, it may be that the UNG2 contributes to the APOBEC3G-mediated loss of infectivity by generating abasic sites in the viral genome. This UNG2 antibody will not cross-react with UNG1.
Quantity	100 µg
Source / Host	Rabbit
Immunogen	UNG2 antibody was raised against a 13 amino acid peptide from near the center of human UNG2.
Purification Method	Affinity chromatography purified via peptide column.
Clone / IgG Subtype	Polyclonal antibody
Species Reactivity	Human, Mouse, Rat
Specificity	At least two isoforms of Cyclin O are known to exist; this antibody will recognize both isoforms.
Formulation	Antibody is supplied in PBS containing 0.02% sodium azide.
Reconstitution	During shipment, small volumes of antibody will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 µl or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.
Storage & Stability	Antibody can be stored at 4°C for three months and at -20°C 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.
Applications	E, WB INote: Antibody might be suitable for other applications not tested so far. Optimal concentrations for each application have to be determined individually. Cyclin O antibody can be used for the detection of Cyclin O by Western blot at 1 - 2 µg/mL.
Images	Available upon request.
References	Krokan HE, Otterlei M, Nilsen H, et al. Properties and functions of human uracil-DNA glycosylase from the UNG gene. <i>Prog. Nucleic Acid Res. Mol. Biol.</i> 2001; 68:365-86. Fromm JC and Verdine GL. Base excision repair. <i>Adv. Protein Chem.</i> 2004; 69:1-41. Willetts KE, Rey F, Agostini I, et al. DNA repair enzyme uracil DNA glycosylase is specifically incorporated into human immunodeficiency virus type 1 viral particles through a Vpr-independent mechanism. <i>J. Virol.</i> 1999; 73:1682-8. Harris RS, Bishop KN, Sheehy AM, et al. DNA deamination mediates innate immunity to retroviral infection. <i>Cell</i> 2003; 113:803-9
Images	Available upon request.
Related Products	APOBEC3G Antibody, Cat. No. PK-AB718-3257 Bladder Lysate, Cat. No. PK-AB718-1310 UNG1 Antibody, Cat. No. PK-AB718-3865 UNG1 Antibody, Cat. No. PK-AB718-3863 UNG2 Antibody, Cat. No. PK-AB718-3859 UNG2 Peptide, Cat. No. PK-AB718-3861P

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