UNG1 (NT) antibody (pAb)

Rabbit Anti-Human/Mouse/Rat Uracil-DNA Glycosylase 1 (UDG1)

PromoKine

Instruction Manual

Catalog Number	PK-AB718-3865
Synonyms	UNG1 Antibody: Uracil-DNA glycosylase 1, UDG1
Description	The human uracil-DNA glycosylase (UNG) gene encodes both mitochondrial (UNG1) and nuclear (UNG2) forms through differentially regulated promotes and alternative splicing. While UNG2 is the major enzyme in the base excision repair pathway that removes uracil residues from nuclear DNA that arise through either misincorporation during replication or cytosine deamination, inhibition of UNG1 by uracil glycosylase inhibitor did not lead to increased levels of spontaneous or induced mitochondrial DNA mutations. However, decreased levels of UNG activity and increased oxidative damage to mitochondrial DNA were seen in older mice, suggesting that mitochondrial DNA repair mechanisms may be involved in various neurodegenerative disorders in an age-dependent manner. This UNG1 antibody will not cross-react with UNG2.
Quantity	100 µg
Source / Host	Rabbit
Immunogen	UNG1 antibody was raised against a 13 amino acid peptide from near the amino terminus of human UNG1.
Purification Method	Affinity chromatography purified via peptide column.
Clone / IgG Subtype	Polyclonal antibody
Species Reactivity	Human, Mouse, Rat
Specificity	
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, IHC, IF lNote: Antibody might be suitable for other applications not tested so far. Optimal concentrations for each application have to be determined indivudually.
	UNG1 antibody can be used for the detection of UNG1 by Western blot at 0.5 - 2 µg/mL. Antibody can also be used for immunohistochemistry starting at 2 µg/mL. For immunofluorescence start at 20 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. Prog. Nucleic Acid Res. Mol. Biol. 2001; 68:365-86. Fromm JC and Verdine GL. Base excision repair. Adv. Protein Chem. 2004; 69:1-41. Kachhap S and Singh KK. Mitochondrial inhibition of uracil-DNA glycosylase is not mutagenic. Mol. Cancer 2004; 3:32. Imam SZ, Karahalil B, Hogue BA, et al. Mitochondrial and nuclear DNA-repair capacity of various brain regions in mouse is altered in an age-dependent manner. Neurobiol. Aging 2006; 27:1129-36.
Images	Available upon request.
Related Products	C2C12 Lysate, Cat. No. PK-AB718-1285 UNG1 Antibody, Cat. No. PK-AB718-3863 UNG1 Peptide, Cat. No. PK-AB718-3865P UNG2 Antibody, Cat. No. PK-AB718-3859 UNG2 Antibody, Cat. No. PK-AB718-3861

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