

Rabbit UNG Polyclonal Antibody | anti-UNG antibody

Anti-UNG Antibody

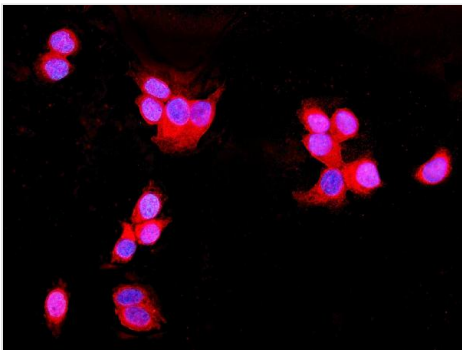
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA19245	Rabbit	Human, Mouse, Rat, Monkey	Western Blot, Immunohistochemistry, Immunocytochemistry, Immunofluorescence, Flow Cytometry, Functional Assay, ELISA

PRODUCT SYNONYMS

UNG; Polyclonal Antibody; Anti-UNG Antibody; DGU; UNG1; UNG15; Uracil-DNA glycosylase; UDG; EC 3. 2. 2. 27; uracil DNA glycosylase; anti-UNG antibody

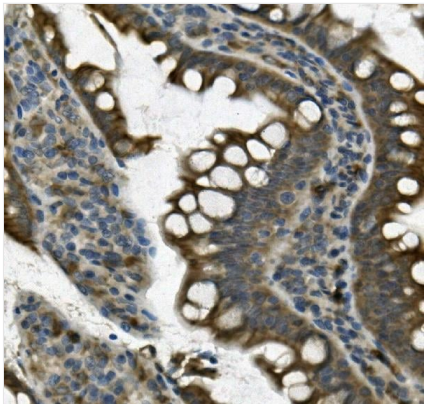
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat, Monkey
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for UNG detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.01mg NaN3.
Applicable Applications for anti-UNG antibody	WB (Western Blot), IHC (Immunohistochemistry), ICC (Immunocytochemistry), IF (Immunofluorescence), FCM/FACS (Flow Cytometry), ELISA (Direct ELISA)
Application Notes	WB: 0.1-0.25ug/ml Human, Mouse, Rat, Monkey IHC-P: 2-5ug/ml Human, Rat ICC/IF: 5ug/ml Human FC/FACS/FCM: 1-3ug/1x106 cells Human Direct ELISA: 0.1-0.5ug/ml Human
Immunogen	E Coli-derived human UNG recombinant protein (Position: E96-L313).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



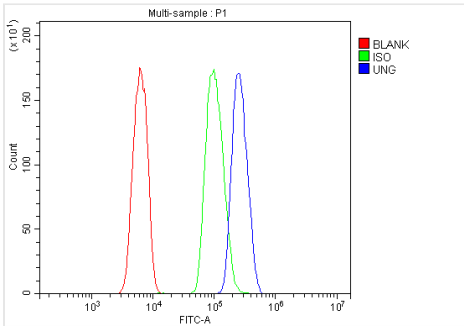
IF (Immunofluorescence)

Figure 6. IF analysis of UNG using anti-UNG antibody (AAA19245).UNG was detected in immunocytochemical section of MCF-7 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5µg/mL rabbit anti- UNG Antibody (AAA19245) overnight at 4 degree C. DyLight®594 Conjugated Goat Anti-Rabbit IgG (BA1142) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



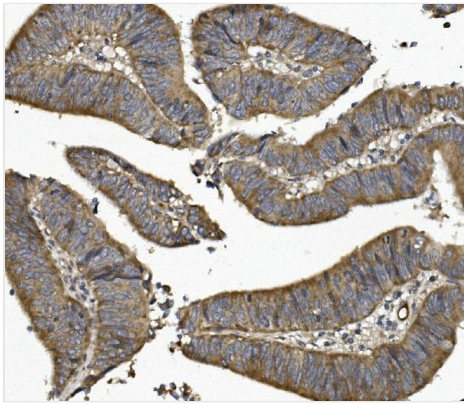
IHC (Immunohistochemistry)

Figure 4. IHC analysis of UNG using anti UNG antibody (AAA19245).UNG was detected in paraffin-embedded section of rat intestine tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2µg/mL rabbit anti-UNG Antibody (AAA19245) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen.



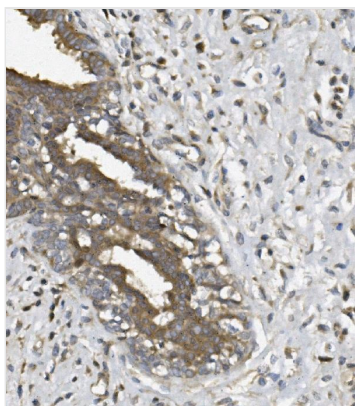
FCM (Flow Cytometry)

Figure 5. Flow Cytometry analysis of HL-60 cells using anti-UNG antibody (AAA19245).Overlay histogram showing HL-60 cells stained with AAA19245 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-UNG Antibody (AAA19245,1µg/g/1x10⁶ cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10µg/g/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1µg/g/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



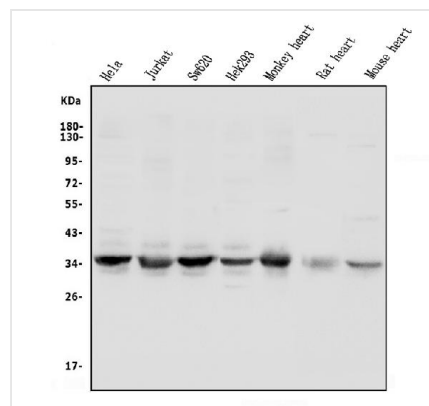
IHC (Immunohistochemistry)

Figure 3. IHC analysis of UNG using anti UNG antibody (AAA19245).UNG was detected in paraffin-embedded section of human rectal cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2µg/mL rabbit anti-UNG Antibody (AAA19245) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen.



IHC (Immunohistochemistry)

Figure 2. IHC analysis of UNG using anti-UNG antibody (AAA19245). UNG was detected in paraffin-embedded section of human mammary cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 µg/ml rabbit anti-UNG Antibody (AAA19245) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen).



WB (Western Blot)

Figure 1. Western blot analysis of UNG using anti-UNG antibody (AAA19245). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50 µg of sample under reducing conditions. Lane 1: human HeLa whole cell lysates; Lane 2: human Jurkat whole cell lysates; Lane 3: human SW620 whole cell lysates; Lane 4: human HEK293 whole cell lysates; Lane 5: monkey heart tissue lysates; Lane 6: rat heart tissue lysates; Lane 7: mouse heart tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-UNG antigen affinity purified polyclonal antibody (Catalog # AAA19245) at 0.25 µg/mL overnight at 4 degree C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # with Tanon 5200 system). A specific band was detected for UNG at approximately 35KD. The expected band size for UNG is at 35KD.

ADDITIONAL INFORMATION

Related Product Information for anti-UNG antibody	Uracil-DNA glycosylase, also known as UNG or UDG, is a human gene though orthologs exist ubiquitously among prokaryotes and eukaryotes and even in some DNA viruses. The first uracil DNA-glycosylase was isolated from <i>Escherichia coli</i> . This gene encodes one of several uracil-DNA glycosylases. One important function of uracil-DNA glycosylases is to prevent mutagenesis by eliminating uracil from DNA molecules by cleaving the N-glycosylic bond and initiating the base-excision repair (BER) pathway. Uracil bases occur from cytosine deamination or misincorporation of dUMP residues. Alternative promoter usage and splicing of this gene leads to two different isoforms: the mitochondrial UNG1 and the nuclear UNG2. The UNG2 term was used as a previous symbol for the CCNO gene, which has been confused with this gene, in the literature and some databases.
References	1. Lindahl T, Ljungquist S, Siebert W, Nyberg B, Sperens B (May 1977). "DNA N-glycosidases: properties of uracil-DNA glycosidase from <i>Escherichia coli</i>". <i>The Journal of Biological Chemistry</i>. 252 (10): 3286-94. 2. Longo MC, Berninger MS, Hartley JL (Sep 1990). "Use of uracil DNA glycosylase to control carry-over contamination in polymerase chain reactions". <i>Gene</i>. 93 (1): 125-8. 3. Pearl LH (Aug 2000). "Structure and function in the uracil-DNA glycosylase superfamily". <i>Mutation Research</i>. 460 (3-4): 165-81.

NCBI AND UNIPROT INFORMATION

NCBI GI #	6224979
NCBI GeneID	7374
NCBI Accession #	NP_003353.1
NCBI GenBank Nucleotide #	NM_003362.3
UniProt Accession #	P13051; O00637; O00719; Q93028; A8K5M6; B2R8Y1
Molecular Weight	34,645 Da
NCBI Official Full Name	uracil-DNA glycosylase isoform UNG1
NCBI Official Synonym Full Names	uracil-DNA glycosylase

NCBI Official Symbol	UNG
NCBI Official Synonym Symbols	DGU; UDG; UNG1; UNG2; HIGM4; HIGM5; UNG15
NCBI Protein Information	uracil-DNA glycosylase; uracil-DNA glycosylase 1, uracil-DNA glycosylase 2
UniProt Protein Name	Uracil-DNA glycosylase
UniProt Gene Name	UNG
UniProt Synonym Gene Names	DGU; UNG1; UNG15; UDG
UniProt Entry Name	UNG_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/polyclonal/ung-antibody-western-blot-immunohistochemistry-immunocytochemistry-immunofluorescence-flow-cytometry-direct-elisa-elisa/19245>