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Goat Anti-POLL / POLkappa Antibody
Peptide-affinity purified goat antibody
Catalog # AF1847a

Specification

Goat Anti-POLL / POLkappa Antibody - Product Information

Application	**IHC, WB**
Primary Accession	Q9UGP5
Other Accession	NP_037406, 27343, 56626 (mouse)
Reactivity	**Human**
Predicted	**Mouse**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**63482**

Goat Anti-POLL / POLkappa Antibody - Additional Information

Gene ID 27343

Other Names
DNA polymerase lambda, Pol Lambda, 2.7.7.7, 4.2.99.-, DNA polymerase beta-2, Pol beta2, DNA polymerase kappa, POLL

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-POLL / POLkappa Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-POLL / POLkappa Antibody - Protein Information

Name POLL (HGNC:9184)

Function
DNA polymerase that functions in several pathways of DNA repair (PubMed:11457865, PubMed:19806195, PubMed:20693240, PubMed:30250067). Involved in

base excision repair (BER) responsible for repair of lesions that give rise to abasic (AP) sites in DNA (PubMed:11457865, PubMed:19806195). Also contributes to DNA double- strand break repair by non-homologous end joining and homologous recombination (PubMed:19806195, PubMed:20693240, PubMed:30250067). Has both template-dependent and template-independent (terminal transferase) DNA polymerase activities (PubMed:10982892, PubMed:10887191, PubMed:12809503, PubMed:14627824, PubMed:15537631, PubMed:19806195). Has also a 5'-deoxyribose-5-phosphate lyase (dRP lyase) activity (PubMed:11457865, PubMed:19806195).

Cellular Location
Nucleus. Chromosome. Note=Accumulates at sites of DNA damage

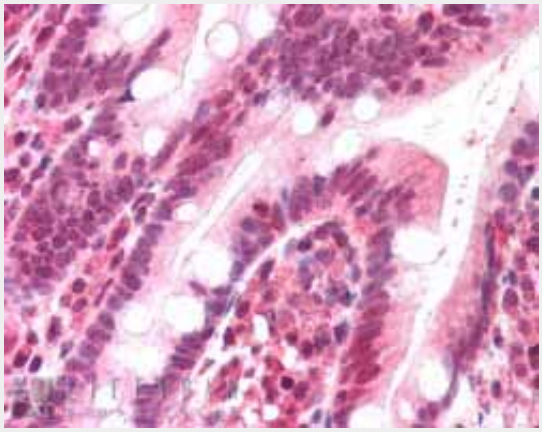
Tissue Location
Expressed in a number of tissues. Abundant in testis.

Goat Anti-POLL / POLkappa Antibody - Protocols

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

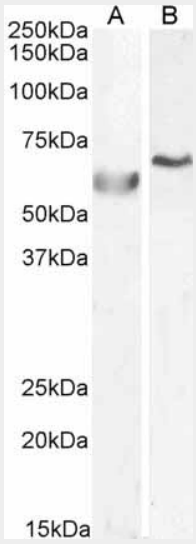
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-POLL / POLkappa Antibody - Images



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AF1847a (5 µg/ml) staining of paraffin embedded Human Small Intestine. Steamed antigen retrieval with citrate buffer pH 6, AP-staining. This data was obtained from a previous batch.



AF1847a (0.5 µg/ml) staining of A549 (A) and (1ug/ul) HepG2 (B) cell lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-POLL / POLkappa Antibody - Background

This gene encodes a DNA polymerase. DNA polymerases catalyze DNA-template-directed extension of the 3'-end of a DNA strand. This particular polymerase, which is a member of the X family of DNA polymerases, likely plays a role in non-homologous end joining and other DNA repair processes. Alternatively spliced transcript variants have been described.

Goat Anti-POLL / POLkappa Antibody - References

DNA polymerases beta and lambda bypass thymine glycol in gapped DNA structures. Belousova EA, et al. Biochemistry, 2010 Jun 8. PMID 20423048.
Interaction between DNA Polymerase lambda and anticancer nucleoside analogs. Garcia-Diaz M, et al. J Biol Chem, 2010 May 28. PMID 20348107.
A novel mechanism of sugar selection utilized by a human X-family DNA polymerase. Brown JA, et al. J Mol Biol, 2010 Jan 15. PMID 19900463.
An 8-oxo-guanine repair pathway coordinated by MUTYH glycosylase and DNA polymerase lambda. van Loon B, et al. Proc Natl Acad Sci U S A, 2009 Oct 27. PMID 19820168.
Characterization of a natural mutator variant of human DNA polymerase lambda which promotes chromosomal instability by compromising NHEJ. Terrados G, et al. PLoS One, 2009 Oct 6. PMID 19806195.