

Rabbit anti-Human, Mouse POLQ Polyclonal Antibody | anti-POLQ antibody

POLQ Antibody

CATALOG # AAA311862	HOST Rabbit	REACTIVITY Human, Mouse	APPLICATIONS Immunohistochemistry
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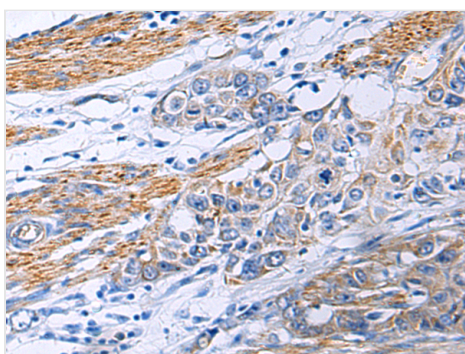
PRODUCT SYNONYMS

POLQ; Polyclonal Antibody; POLQ Antibody; PRO0327; anti-POLQ antibody

PRODUCT SPECIFICATIONS

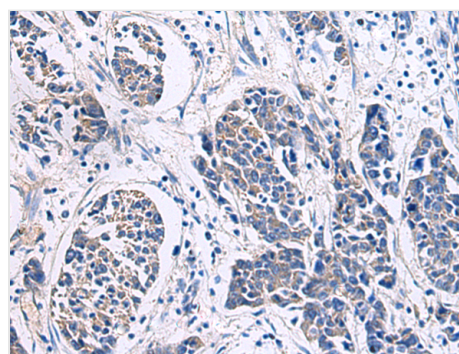
Host	Rabbit
Reactivity	Human, Mouse
Clonality	Polyclonal
Purity/Purification	Antigen affinity purification
Form/Format	pH7.4 PBS, 0.05% NaN ₃ , 40% Glycerol
Concentration	0.9mg/mL (varies by lot)
Sequence Length	2590
Applicable Applications for anti-POLQ antibody	IHC (Immunohistochemistry)
Immunogen	Synthetic peptide of human POLQ
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C for 1 year.

IMAGES



IHC (Immunohistochemistry)

The image is immunohistochemistry of paraffin-embedded Human esophagus cancer using (POLQ Antibody) at dilution 1/30.



IHC (Immunohistochemistry)

The image is immunohistochemistry of paraffin-embedded Human colorectal cancer using (POLQ Antibody) at dilution 1/30.

ADDITIONAL INFORMATION

Related Product Information for anti-POLQ antibody	DNA polymerase that promotes microhomology-mediated end-joining (MMEJ), an alternative non-homologous end-joining (NHEJ) machinery triggered in response to double-strand breaks in DNA (PubMed:25642963, PubMed:25643323). MMEJ is an error-prone repair pathway that produces deletions of sequences from the strand being repaired and promotes genomic rearrangements, such as telomere fusions, some of them leading to cellular transformation (PubMed:25642963, PubMed:25643323). POLQ acts as an inhibitor of homology-recombination repair (HR) pathway by limiting RAD51 accumulation at resected ends (PubMed:25642963). POLQ-mediated MMEJ may be required to promote the survival of cells with a compromised HR repair pathway, thereby preventing genomic havoc by resolving unrepaired lesions (By similarity). The polymerase acts by binding directly the 2 ends of resected double-strand breaks, allowing microhomologous sequences in the overhangs to form base pairs. It then extends each strand from the base-paired region using the opposing overhang as a template. Requires partially resected DNA containing 2 to 6 base pairs of microhomology to perform MMEJ (PubMed:25643323). The polymerase activity is highly promiscuous: unlike most polymerases, promotes extension of ssDNA and partial ssDNA (pssDNA) substrates (PubMed:18503084, PubMed:21050863, PubMed:22135286). Also exhibits low-fidelity DNA synthesis, translesion synthesis and lyase activity, and it is implicated in interstrand-cross-link repair, base excision repair and DNA end-joining (PubMed:14576298, PubMed:18503084, PubMed:19188258, PubMed:24648516). Involved in somatic hypermutation of immunoglobulin genes, a process that requires the activity of DNA polymerases to ultimately introduce mutations at both A/T and C/G base pairs (By similarity).
Product Categories/Family for anti-POLQ antibody	Total protein Ab

NCBI AND UNIPROT INFORMATION

NCBI GI #	139394648
NCBI GeneID	10721
NCBI Accession #	NP_955452
NCBI GenBank Nucleotide #	NP_955452.3
UniProt Accession #	O95125; O75417
NCBI Official Full Name	DNA polymerase theta
NCBI Official Synonym Full Names	DNA polymerase theta
NCBI Official Symbol	POLQ
NCBI Official Synonym Symbols	PRO0327
NCBI Protein Information	DNA polymerase theta
UniProt Protein Name	Zinc finger protein 202
UniProt Gene Name	ZNF202
UniProt Synonym Gene Names	ZKSCAN10
UniProt Entry Name	ZN202_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/polq-antibody-immunohistochemistry-elisa/311862>