

<b>Product name:</b>	Exo1 Rabbit Polyclonal Antibody
<b>Cat number:</b>	ABN10656
<b>Conjugate:</b>	Unconjugated
<b>Size:</b>	100µL
<b>Clone:</b>	Polyclonal
<b>Concentration:</b>	1mg/ml
<b>Host:</b>	Rabbit
<b>Isotype:</b>	IgG
<b>Immunogen:</b>	The antiserum was produced against synthesized peptide derived from human EXO1. AA range:61-110
<b>Reactivity:</b>	Human,Mouse
<b>Applications:</b>	WB 1:500-1:2000,ICC/IF 1:200-1:1000,ELISA 1:5000-1:20000
<b>Molecular Weight:</b>	94kDa
<b>Purification:</b>	Affinity purification
<b>Form:</b>	Liquid
<b>Buffer:</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
<b>Storage:</b>	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

**Background:**

This gene encodes a protein with 5' to 3' exonuclease activity as well as an RNase H activity. It is similar to the *Saccharomyces cerevisiae* protein Exo1 which interacts with Msh2 and which is involved in mismatch repair and recombination. Alternative splicing of this gene results in three transcript variants encoding two different isoforms. [provided by RefSeq, Jul 2008], cofactor: Binds 2 magnesium ions per subunit. They probably participate in the reaction catalyzed by the enzyme. May bind an additional third magnesium ion after substrate binding., developmental stage: Highly expressed in fetal liver and at lower levels in fetal brain, heart, kidney, spleen and thymus., function: 5'->3' double-stranded DNA exonuclease which may also possess a cryptic 3'->5' double-stranded DNA exonuclease activity. Functions in DNA mismatch repair (MMR) to excise mismatch-containing DNA tracts directed by strand breaks located either 5' or 3' to the mismatch. Also exhibits endonuclease activity against 5'-overhanging flap structures similar to those generated by displacement synthesis when DNA polymerase encounters the 5'-end of a downstream Okazaki fragment. Required for somatic hypermutation (SHM) and class switch recombination (CSR) of immunoglobulin genes. Essential for male and female meiosis., polymorphism: Most naturally occurring variants in this protein are not associated with familial disposition to hereditary non-polyposis colorectal cancer (HNPCC). Furthermore, germline deletions involving this locus are not associated with clinically manifested colorectal tumors., PTM: Phosphorylated upon DNA damage, probably by ATM or ATR., similarity: Belongs to the XPG/RAD2 endonuclease family. EXO1 subfamily., subcellular location: Colocalizes with PCNA to discrete nuclear foci in S-phase., subunit: Interacts with the MLH1-PMS2 heterodimer via MLH1. Interacts with MSH3. Interacts with the MSH2-MSH6 heterodimer via MSH2, and this interaction may increase the processivity of the 5'->3' exonuclease activity. Interacts with PCNA, and this interaction may both stimulate the cryptic 3'->5' exonuclease activity and suppress the 5'->3' exonuclease activity. Interacts with WRN, and this interaction stimulates both the 5'->3' exonuclease activity and cleavage of 5'-overhanging flap structures. Interacts with RECQL/RECQ1, and this interaction stimulates cleavage of 5'-overhanging flap structures., tissue specificity: Highly expressed in bone marrow, testis and thymus. Expressed at lower levels in colon, lymph nodes, ovary, placenta, prostate, small intestine, spleen and stomach.,