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EXO1 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2871a

Product Information

Application	IF, WB, E
Primary Accession	Q9UQ84
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB17682
Calculated MW	94103
Antigen Region	1-30

Additional Information

Gene ID	9156
Other Names	Exonuclease 1, hExo1, 31--, Exonuclease I, hExoI, EXO1, EXOI, HEX1
Target/Specificity	This EXO1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human EXO1.
Dilution	IF~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	EXO1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	EXO1
Synonyms	EXOI, HEX1
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.
Cellular Location	Nucleus Note=Colocalizes with PCNA to discrete nuclear foci in S-phase
Tissue Location	Highly expressed in bone marrow, testis and thymus. Expressed at lower levels in colon, lymph nodes, ovary, placenta, prostate, small intestine, spleen and stomach

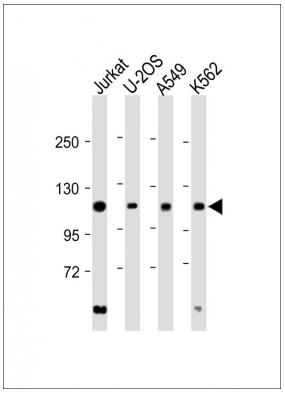
Background

EXO1 is a protein with 5' to 3' exonuclease activity as well as an RNase H activity. This protein is similar to the Saccharomyces cerevisiae protein Exo1 which interacts with Msh2 and which is involved in mismatch repair and recombination.

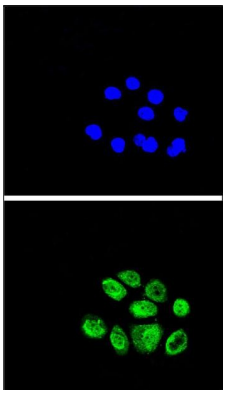
References

Tishkoff D.X., Amin N.S., Viars C.S.Cancer Res. 58:5027-5031(1998)
Lee B.-I., Nguyen L.H.,Nucleic Acids Res. 30:942-949(2002)
Alam N.A., Gorman P., Jaeger E.E.M.Cancer Genet. Cytogenet. 147:121-127(2003)
Knudsen N.O., Nielsen F.C., Vinther L.Nucleic Acids Res. 35:2609-2619(2007)

Images



All lanes : Anti-EXO1 Antibody (N-term) at 1:2000 dilution Lane 1: Jurkat whole cell lysate Lane 2: U-2OS whole cell lysate Lane 3: A549 whole cell lysate Lane 4: K562 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 94 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Confocal immunofluorescent analysis of EXO1 Antibody (N-term) (Cat. #AP2871a) with A549 cell followed by Alexa Fluor® 489-conjugated goat anti-rabbit IgG (green). DAPI was used to stain the cell nuclear (blue).