



DNA Ligase III Rabbit mAb

Catalog No	YP-rAb-16983
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB,IHC,IF,IP,ELISA
Gene Name	LIG3
Protein Name	DNA ligase 3
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	IHC 1:100-1:200; WB 1:2000-1:10000; IF 1:200-1:1000; ELISA 1:5000-1:20000; IP 1:50-1:200; Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15 ° C to -25 ° C/1 year(Do not lower than -25 ° C)
Synonyms	DNA Ligase III;DNA ligase 3;LIG3 ; DNA ligase 3 ; DNA ligase III ; Polydeoxyribonucleotide synthase [ATP] 3;LIG3
Observed Band	102kD
Calculated Molecular Weight	113kD
Cell Pathway	[Isoform 1]: Mitochondrion . Contains an N-terminal mitochondrial transit peptide. . ; [Isoform 2]: Mitochondrion . Contains an N-terminal mitochondrial transit p eptide. . ; [Isoform 3]: Nucleus . Lacks the N-terminal mitochondrial transit peptide. . ; [Isoform 4]: Nucleus . Lacks the N-terminal mitochondrial transit peptide. .
Tissue Specificity	Testis, thymus, prostate and heart.
Function	Catalytic activity:ATP + (deoxyribonucleotide)(n) + (deoxyribonucleotide)(m) = AMP + diphosphate + (deoxyribonucleotide)(n+m).,cofactor:Magnesium.,Function:Interacts with DNA-repair protein XRCC1 and can correct defective DNA strand-break repair and sister chromatid exchange following treatment with ionizing radiation and alkylating agents.,online information:DNA ligase entry,similarity:Belongs to the ATP-dependent DNA ligase family.,similarity:Contains 1 BRCT domain.,similarity:Contains 1 PARP-type zinc finger.,tissue specificity:Testis, thymus, prostate and heart.,



Background

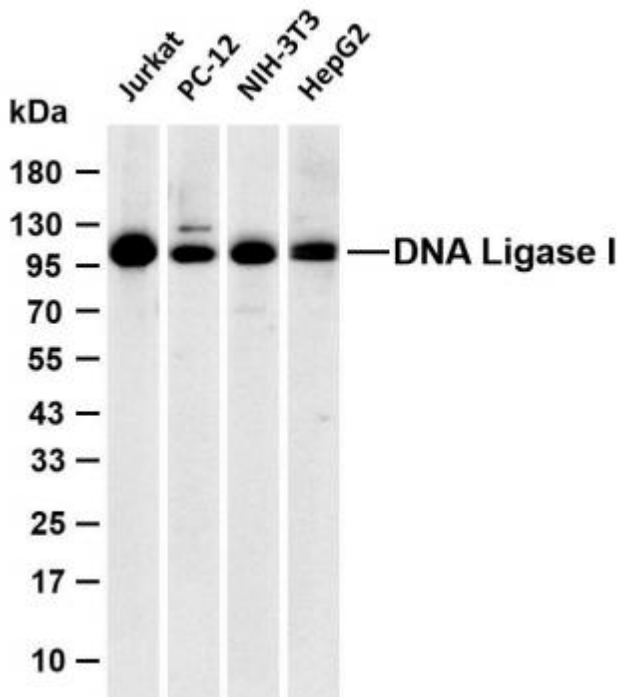
This gene is a member of the DNA ligase family. Each member of this family encodes a protein that catalyzes the joining of DNA ends but they each have a distinct role in DNA metabolism. The protein encoded by this gene is involved in excision repair and is located in both the mitochondria and nucleus, with translation initiation from the upstream start codon allowing for transport to the mitochondria and translation initiation from a downstream start codon allowing for transport to the nucleus. Additionally, alternate transcriptional splice variants, encoding different isoforms, have been characterized. [provided by RefSeq, Jul 2008],

matters needing attention

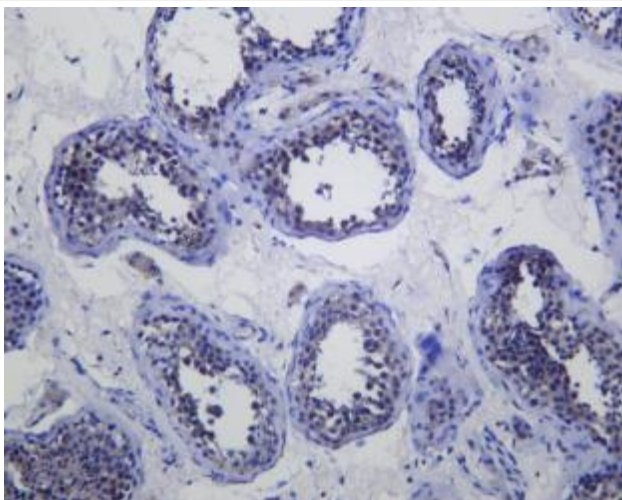
Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-DNA Ligase III antibody. The HRP-conjugated Goat anti-Rabbit IgG (H + L) antibody was used to detect the antibody. Lane 1: Jurkat Lane 2: PC-12 Lane 3: NIH-3T3 Lane 4: HepG2 Predicted band size: 113kDa Observed band size: 102kDa



Human testis was stained with anti-DNA Ligase III Rabbit antibody

