



# DNA Ligase IV Polyclonal Antibody

Cat No: HR1AP3294

For research use only

## Overview

Product Name	DNA Ligase IV Polyclonal Antibody
Source	Rabbit
Applications	WB,IHC-p,IF,ELISA
Species Reactivity	Human
Recommended Dilutions	
Immunogen	
Species	Rabbit
Storage	-20°C/1 year
Isotype	
Clonality	
Concentration	1 mg/ml
Observed band	103kDa
GenelID?Human?	LIG4
Human Swiss-Prot No.	
Cellular localization	
Alternative Names	LIG4; DNA ligase 4; DNA ligase IV; Polydeoxyribonucleotide synthase [ATP] 4
Background	DNA ligase 4(LIG4) Homo sapiens The protein encoded by this gene is a DNA ligase that joins single-strand breaks in a double-stranded polydeoxynucleotide in an ATP-dependent reaction. This protein is essential for V(D)J recombination and DNA double-strand break (DSB) repair through nonhomologous end joining (NHEJ). This protein forms a complex with the X-ray repair cross complementing protein 4 (XRCC4), and further interacts with the DNA-dependent protein kinase (DNA-PK). Both XRCC4 and DNA-PK are known to be required for NHEJ. The crystal structure of the complex formed by this protein and XRCC4 has been resolved. Defects in this gene are the cause of LIG4 syndrome. Alternatively spliced transcript variants encoding the same protein have been observed. [provided by RefSeq, Jul 2008],