



## DNA Ligase IV Polyclonal Antibody

Cat #: ABP55114

Size: 30µl /100µl /200µl

### Product Information

	<b>Product Name:</b> DNA Ligase IV Polyclonal Antibody		
	<b>Applications:</b> IHC-P, ELISA		<b>Isotype:</b> Rabbit IgG
	<b>Reactivity:</b> Human		
<b>REF</b>	<b>Catalog Number:</b> ABP55114	<b>LOT</b>	<b>Lot Number:</b> Refer to product label
	<b>Formulation:</b> Liquid		<b>Concentration:</b> 1 mg/ml
	<b>Storage:</b> Store at -20°C. Avoid repeated freeze / thaw cycles.		<b>Note:</b> Contain sodium azide.

**Background:** The protein encoded by *LIG4* 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.

**Application Notes:** Optimal working dilutions should be determined experimentally by the investigator. Suggested starting dilutions are as follows: IHC-P (1:100-1:300), ELISA (1:20000). Not yet tested in other applications.

**Storage Buffer:** PBS containing 50% Glycerol, 0.5% BSA and 0.02% Sodium Azide.

**Storage Instructions:** Stable for one year at -20°C from date of shipment. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap. Aliquot to avoid repeated freezing and thawing.

**Note:** The product listed herein is for research use only and is not intended for use in human or clinical diagnosis. Suggested applications of our products are not recommendations to use our products in violation of any patent or as a license. We cannot be responsible for patent infringements or other violations that may occur with the use of this product.