



# DNA Ligase IV rabbit pAb

Cat No.:ES6113

For research use only

## Overview

<b>Product Name</b>	DNA Ligase IV rabbit pAb
<b>Host species</b>	Rabbit
<b>Applications</b>	IHC;IF;WB;ELISA
<b>Species Cross-Reactivity</b>	Human;Rat;Mouse;
<b>Recommended dilutions</b>	WB 1:500-2000 Immunohistochemistry: 1/100 - 1/300. ELISA: 1/20000. Not yet tested in other applications.
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human DNA Ligase 4. AA range:616-665
<b>Specificity</b>	DNA Ligase IV Polyclonal Antibody detects endogenous levels of DNA Ligase IV protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Storage</b>	Store at -20°C. Avoid repeated freeze-thaw cycles.
<b>Protein Name</b>	DNA ligase 4
<b>Gene Name</b>	LIG4
<b>Cellular localization</b>	Nucleus .
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Clonality</b>	Polyclonal
<b>Concentration</b>	1 mg/ml
<b>Observed band</b>	133kD
<b>Human Gene ID</b>	3981
<b>Human Swiss-Prot Number</b>	P49917
<b>Alternative Names</b>	LIG4; DNA ligase 4; DNA ligase IV; Polydeoxyribonucleotide synthase [ATP] 4
<b>Background</b>	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],

Immunohistochemical analysis of paraffin-embedded Human prostate cancer. Antibody was diluted at 1:100(4° overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negative contrl (right) obtaned from antibody was pre-abs

