

## DNA Ligase4 Polyclonal Antibody

Catalog No. E-AB-31212

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

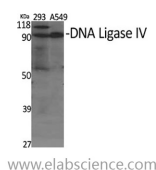
### Description

<b>Reactivity</b>	Human
<b>Immunogen</b>	Synthesized peptide derived from the Internal region of human DNA Ligase IV
<b>Host</b>	Rabbit
<b>Isotype</b>	IgG
<b>Purification</b>	Affinity purification
<b>Buffer</b>	PBS with 0.02% sodium azide, 0.5% protective protein and 50% glycerol, pH7.4

### Applications Recommended Dilution

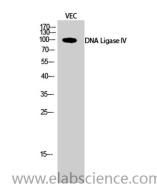
<b>WB</b>	1:500-1:2000
<b>IHC</b>	1:100-1:300
<b>IF</b>	1:200-1:1000
<b>ELISA</b>	1:20000

### Data



Western Blot analysis of 293, A549 cells using DNA Ligase4 Polyclonal Antibody at dilution of 1:500.

**Observed Mw:103kDa**  
**Calculated Mw:104kDa**



Western Blot analysis of VEC cells using DNA Ligase4 Polyclonal Antibody at dilution of 1:500.

### Preparation & Storage

**Storage** Store at -20°C. Avoid freeze / thaw cycles.

### Background

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.

### For Research Use Only