

## Product datasheet for **TA366068**

### DNA Ligase IV (LIG4) Rabbit Polyclonal Antibody

#### Product data:

|                       |   |
|-----------------------|---|
| Product Type:         | Primary Antibodies  |
| Applications:         | IHC   |
| Recommended Dilution: | IHC: 50-300<br>Positive control: Human esophagus cancer<br>Predicted cell location: Nucleus |
| Reactivity:           | Human, Mouse  |
| Host:                 | Rabbit  |
| Isotype:              | IgG   |
| Clonality:            | Polyclonal  |
| Immunogen:            | Fusion protein of human LIG4  |
| Formulation:          | pH7.4 PBS, 0.05% NaN <sub>3</sub> , 40% Glycerol  |
| Concentration:        | lot specific  |
| Purification:         | Antigen affinity purification   |
| Conjugation:          | Unconjugated  |
| Storage:              | Store at -20°C.   |
| Stability:            | 1 year  |
| Gene Name:            | DNA ligase 4  |
| Database Link:        | <a href="#">Entrez Gene 3981 Human P49917</a>   |

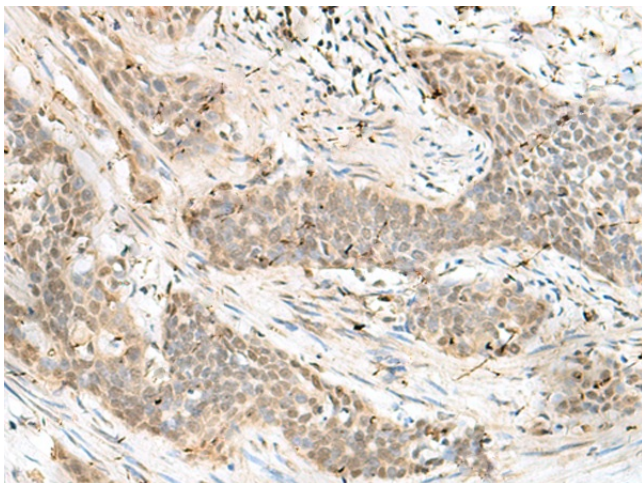
**Background:** The protein encoded by this gene is a DNA ligase that joins single-strand breaks in a double-stranded polydeoxynucleotide in an ATP-dependent reaction. This protein is essential for V(D)J recombination and DNA double-strand break (DSB) repair through nonhomologous end joining (NHEJ). 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.



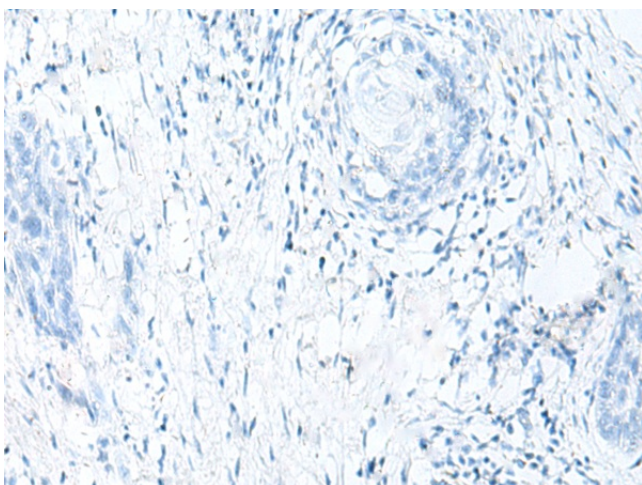
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Synonyms: sealase

### Product images:



Immunohistochemistry of paraffin-embedded Human esophagus cancer tissue using TA366068 (LIG4 Antibody) at dilution 1/60 (Original magnification: x200)



Immunohistochemistry of paraffin-embedded Human esophagus cancer tissue using TA366068 (LIG4 Antibody) at dilution 1/60, treated with fusion protein. (Original magnification: x200)