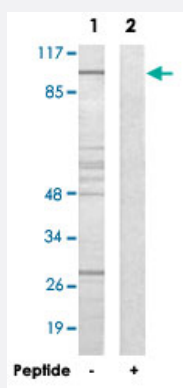


LIG4 polyclonal antibody

Catalog # PAB17540

Size 100 ug

Applications



Western Blot (Cell lysate)

Western blot analysis of extracts from Jurkat cells, using LIG4 polyclonal antibody (Cat # PAB17540).

Peptide "+" means "with peptide blocking".

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of LIG4.
Immunogen	A synthetic peptide corresponding to internal of human LIG4.
Host	Rabbit
Reactivity	Human
Specificity	This antibody detects endogenous levels of total LIG4 protein.
Form	Liquid
Recommend Usage	Western Blot (1:500-1:1000) ELISA (1:20000) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, pH 7.4 (150mM NaCl, 0.02% sodium azide, 50% glycerol)
Storage Instruction	Store at -20°C. Aliquot to avoid repeated freezing and thawing.

Note

This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot (Cell lysate)

Western blot analysis of extracts from Jurkat cells, using LIG4 polyclonal antibody (Cat # PAB17540).

Peptide "+" means "with peptide blocking".

- Enzyme-linked Immunoabsorbent Assay

Gene Info — LIG4

Entrez GeneID [3981](#)

Protein Accession# [P49917](#)

Gene Name LIG4

Gene Alias -

Gene Description ligase IV, DNA, ATP-dependent

Omim ID [254500](#) [601837](#) [606593](#)

Gene Ontology [Hyperlink](#)

Gene Summary

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]

Other Designations

DNA joinase|DNA ligase IV|DNA repair enzyme|polydeoxyribonucleotide synthase [ATP] 4|polynucleotide ligase|sealase

Pathway

- [Non-homologous end-joining](#)

Disease

- [Adenocarcinoma](#)
- [Ascariasis](#)
- [Asthma](#)
- [Ataxia telangiectasia](#)
- [Brain Neoplasms](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Carcinoma](#)
- [Colorectal Neoplasms](#)
- [DNA Damage](#)
- [Esophageal Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Genomic Instability](#)
- [Glioma](#)
- [Head and Neck Neoplasms](#)
- [Hematologic Diseases](#)
- [Hodgkin Disease](#)
- [Immunologic Deficiency Syndromes](#)
- [Kidney Failure](#)
- [Lung Neoplasms](#)
- [Lymphoma](#)
- [Lymphoproliferative Disorders](#)
- [Malignant melanoma](#)
- [Melanoma](#)
- [Meningeal Neoplasms](#)

- [Meningioma](#)
- [Mouth Neoplasms](#)
- [Multiple Myeloma](#)
- [Multiple Sclerosis](#)
- [Neoplasm Invasiveness](#)
- [Neoplasms](#)
- [Neuroma](#)
- [Occupational Diseases](#)
- [Ovarian cancer](#)
- [Ovarian Neoplasms](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Precancerous Conditions](#)
- [Prostate cancer](#)
- [Prostatic Neoplasms](#)
- [Pulmonary Disease](#)
- [Radiodermatitis](#)
- [Severe Combined Immunodeficiency](#)
- [Skin Neoplasms](#)
- [Stomach Neoplasms](#)
- [Thyroid Neoplasms](#)
- [Urinary Bladder Neoplasms](#)
- [Uterine Cervical Neoplasms](#)
- [Waldenstrom Macroglobulinemia](#)
- [Werner syndrome](#)