

DNAxPAb

Hard-to-Find
Antibody

LIG4 DNAxPab

Catalog # H00003981-W01P

Size 200 ug

Specification

Product Description	Rabbit polyclonal antibody raised against a full-length human LIG4 DNA using DNAx™ Immune technology.
Technology	DNAx™ Immune
Immunogen	Full-length human DNA
Sequence	MAASQTSQTVASHVPFADLCSTLERIQKSKGRAEKIRHFREFLD SWRKFHDALHKNHKDVTDSFY PAMRLILPQLERERMAYGIKETMLAKLYIELNLPRDGKDALKLLNYRTPGTGHDAGDFAMIA YFVL KPRCLQKGS LTQQVNDLLDSIASNNSAKRKDLIKSLLQLITQSSALEQKWLIRMIKDLKLGVSQQ TIFSVFHNDAAELHNVTTDLEKVCRQLHDP SVGLSDISITLFSAFKPMLAAIADIEHIEKDMKHQS FY ETKLDGERMQMHKGDGVYKYFSRNGYNYTDQFGASPTEGSLTPFIHNAFKADIQICILDGEMMAYN PNTQTTFMQKGTKFDIKRMVEDSDLQTCYCVFDVLMVNNKKLGHETLRKRYEILSSIFTPIPGRIE VQ KTQAHTKNEVIDALNEAIDKREEGIMVKQPLSYKPDKRGE GWLKIKPEYVSGLMDELDILVGGYW GKGSRGGMMSHFLCAVAEKPPPGEKPSVFHTLSRVGSGCTMKELYDLGLKLAKYWKPFHRKAP PSSILCGTEKPEVYIEPCNSVIVQIKAAENPSDMYKTGCTLRFPRIEKIRDDKEWHECMTLDDLEQL RGKASGKLASKHLYIGGDDEPQEKKRKAAPKMKKVIGIIEHLKAPNL TNVNKISNIFEDVEFCVMSG TDSQPKPDLENRIA EFGGYVQNP GPDTYCVIAGSENIRVKNIILSNKHDVVKPAWLLECFKTKSFV PWQPRFMIHMCPSTKEHFAREYDCYGSYFIDTDLNQLKEVFSGIKNSNEQTPEEMASLIADLEYR YSWDCSPLSMFRRHTVYLD SYAVINDLSTKNEGTRLAIKALELRFHGAKVVSCLAEGVSHVIIGED HSRVADFKAFRRTFKRKFKILKESWVTDSIDKCELQEENQYLI
Host	Rabbit
Reactivity	Human
Purification	Protein A
Quality Control Testing	Antibody reactive against mammalian transfected lysate.
Storage Buffer	In 1x PBS, pH 7.4
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot (Transfected lysate)

[Protocol Download](#)

- Immunofluorescence (Transfected cell)

- Flow Cytometry (Transfected cell)

Gene Info — LIG4

Entrez GeneID [3981](#)

GeneBank Accession# [BC037491](#)

Protein Accession# [AAH37491](#)

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](#)