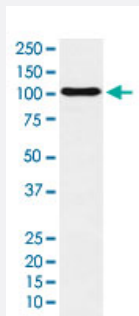


LIG4 monoclonal antibody, clone ADHG-12

Catalog # MAB22113 Size 100 uL

Applications



Western Blot (Cell lysate)

Western Blot (cell lysate) analysis of Ramos cell lysate.

Specification

Product Description	Rabbit monoclonal antibody raised against synthetic protein of human LIG4.
Immunogen	A synthetic peptide corresponding to human LIG4.
Host	Rabbit
Reactivity	Human
Specificity	This antibody reacts with human LIG4, in native form and recombinant. Superfamily members of LIG4 are not reactive to antibody.
Form	Liquid
Purification	Affinity purification
Isotype	IgG
Recommend Usage	Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) (1:50-200) Immunofluorescence (1:50-200) Immunocytochemistry (1:50-200) Western Blot (1:500-2000) The optimal working dilution should be determined by the end user.

Storage Buffer	In PBS, 150 mM NaCl, pH 7.4 (50% glycerol, 0.02% sodium azide).
Storage Instruction	Store at 4°C. For long term storage 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 (cell lysate) analysis of Ramos cell lysate.

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

- Immunocytochemistry

- Immunofluorescence

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]
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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](#)