

Product datasheet

Anti-DNA Ligase IV antibody ab26039

★★★★☆ 2 Abreviews 10 References 2 Images

Overview

Product name	Anti-DNA Ligase IV antibody
Description	Rabbit polyclonal to DNA Ligase IV
Host species	Rabbit
Tested applications	Suitable for: IHC-P, IP, WB
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat, Rabbit, Horse, Chicken, Guinea pig, Cow, Cat, Dog

Immunogen

A region within a synthetic peptide: IADIEHIEKD MKHQSFYIET KLDGERMQMH KDGDVYKYFS RNGYNYTDQF, corresponding to internal sequence amino acids 253-302 of DNA Ligase IV

[Run BLAST with ExPASy](#) [Run BLAST with NCBI](#)

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer	Preservative: None Constituents: 2% Sucrose, PBS
Purity	Protein A purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab26039** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

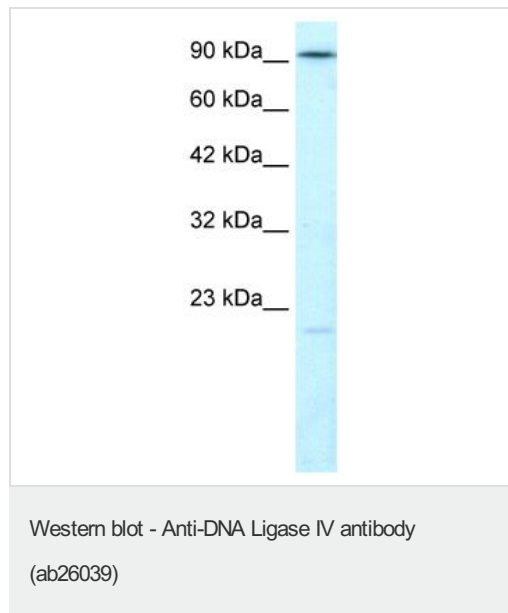
Application	Abreviews	Notes
IHC-P		Use a concentration of 4 - 8 µg/ml.

Application	Abreviews	Notes
IP		Use at an assay dependent concentration. PubMed: 18451142
WB	★★★★☆	Use a concentration of 1.25 µg/ml. Predicted molecular weight: 109 kDa. Good results were obtained when blocked with 5% non-fat dry milk in 0.05% PBS-T.

Target

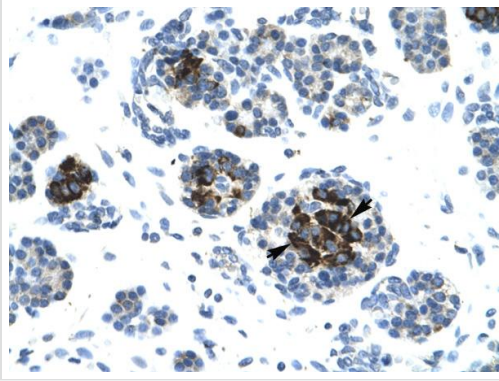
Function	Efficiently joins single-strand breaks in a double-stranded polydeoxynucleotide in an ATP-dependent reaction. Involved in DNA non-homologous end joining (NHEJ) required for double-strand break repair and V(D)J recombination. The LIG4-XRCC4 complex is responsible for the NHEJ ligation step, and XRCC4 enhances the joining activity of LIG4. Binding of the LIG4-XRCC4 complex to DNA ends is dependent on the assembly of the DNA-dependent protein kinase complex DNA-PK to these DNA ends.
Tissue specificity	Testis, thymus, prostate and heart.
Involvement in disease	LIG4 syndrome Severe combined immunodeficiency autosomal recessive T-cell-negative/B-cell-negative/NK-cell-positive with sensitivity to ionizing radiation
Sequence similarities	Belongs to the ATP-dependent DNA ligase family. Contains 2 BRCT domains.
Cellular localization	Nucleus.

Images



Anti-DNA Ligase IV antibody (ab26039) at 1.25 µg/ml + HepG2 cell lysate

Predicted band size: 109 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human pancreas tissue labelling DNA Ligase IV with ab26039 at a concentration of 4-8µg/ml. Cells with positive label (as indicated by the arrows) are epithelial cells of the pancreatic acinus. Magnification 400X.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-DNA Ligase IV antibody (ab26039)

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