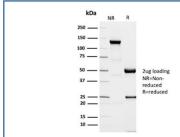


# DNA Ligase 1 Antibody / LIG1 [clone 1A9] (V7924)

Catalog No.	Formulation	Size
V7924-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7924-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7924SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

## **Bulk quote request**

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	1A9
Purity	Protein G affinity chromatography
UniProt	P18858
Localization	Nuclear
Applications	Western Blot : 2-4ug/ml ELISA :
Limitations	This DNA Ligase 1 antibody is available for research use only.



SDS-PAGE analysis of purified, BSA-free DNA Ligase 1 antibody (clone 1A9) as confirmation of integrity and purity.

### **Description**

DNA Ligase I maintains the major DNA Ligase activity in proliferating cells by joining Okazaki fragments during lagging

strand DNA replication. Human DNA Ligase I also has an essential role in DNA repair pathways, where it catalyzes the formation of phosphodiester bonds between adjacent 5' phosphoryl and 3' hydroxy termini at single breaks in duplex DNA molecules. In addition, DNA Ligase I plays a role in sealing nicks during excision repair. Similar to other DNA ligases, DNA Ligase I is built around a common catalytic core. Increased levels of DNA Ligase I are found in human tumors, as compared to benign tissues, as well as in peripheral blood lymphocytes. Furthermore, DNA Ligase I antisense ODNs syndrome (BS). Individuals with BS either have decreased levels of abnormally thermolabile DNA Ligase I or possess a dimeric form of this enzyme.

#### **Application Notes**

Optimal dilution of the DNA Ligase 1 antibody should be determined by the researcher.

#### **Immunogen**

Full-length native cow LIG1 protein was used as the immunogen for the DNA Ligase 1 antibody.

#### **Storage**

Store the DNA Ligase 1 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).