

### 36-2705: Anti-DNA Ligase 1 Monoclonal Antibody(Clone: 1A9)

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	1A9
<b>Application :</b>	WB,ELISA,IP
<b>Reactivity :</b>	Human, Mouse, Rat
<b>Gene :</b>	LIG1
<b>Gene ID :</b>	3978
<b>Uniprot ID :</b>	P18858
<b>Alternative Name :</b>	DNA ligase 1; DNA ligase I; DNLI1_HUMAN; LIG 1; lig1; Ligase I DNA ATP dependent; MGC117397; MGC130025; Polydeoxyribonucleotide synthase [ATP] 1
<b>Isotype :</b>	Mouse IgG1, kappa
<b>Immunogen Information :</b>	Full-length native cow LIG1 protein

#### 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.

#### Product Info

<b>Amount :</b>	20 µg / 100 µg
<b>Content :</b>	200 µg/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
<b>Storage condition :</b>	Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous.

#### Application Note

Western Blot (1-2ug/ml); ELISA; Immunoprecipitation;