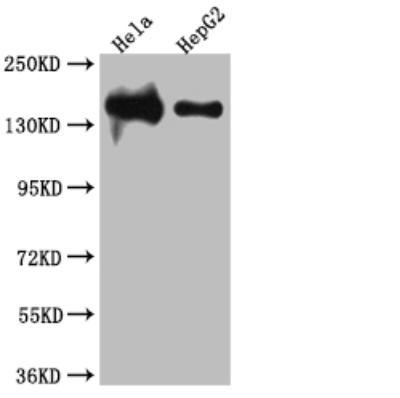
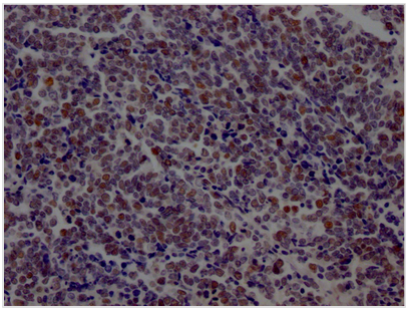
LIG1 Antibody

Product Code	CSB-RA877322A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P18858
Immunogen	A synthesized peptide derived from human DNA Ligase I
Species Reactivity	Human
Tested Applications	ELISA, WB, IHC; Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200
Relevance	DNA ligase that seals nicks in double-stranded DNA during DNA replication, DNA recombination and DNA repair.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Epigenetics and Nuclear Signaling
Gene Names	LIG1
Accession NO.	7B2

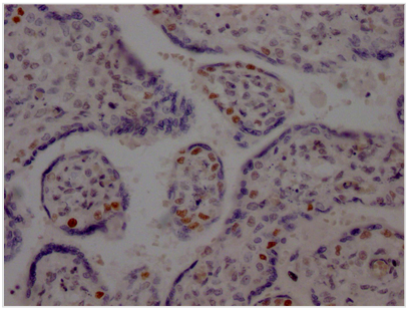
Image



Western Blot
Positive WB detected in: Hela whole cell lysate, HepG2 whole cell lysate
All lanes: DNA Ligase I antibody at 1:1000
Secondary
Goat polyclonal to rabbit IgG at 1/50000 dilution
Predicted band size: 102, 89, 99 kDa
Observed band size: 140 kDa



IHC image of CSB-RA877322A0HU diluted at 1:100 and staining in paraffin-embedded human lung cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.



IHC image of CSB-RA877322A0HU diluted at 1:100 and staining in paraffin-embedded human placenta tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.

Description

LIG1 is the main replicative ligase involved in DNA replication, recombination, and the base excision repair process. LIG1 is associated with the replisome to finalize Okazaki fragment maturation, completing more than 50 million ligation events during each cycle of DNA replication. It also ligates single-strand DNA breaks during long-patch base excision repair (BER) and can participate in the alternative end-joining (A-EJ) pathway. LIG1 employs a unique metal-mediated fidelity mechanism whereby rigidity imposed by metal binding allows for discrimination against base mismatches on the 3′-hydroxyl side of the nick.

This recombinant LIG1 antibody was developed with the Single B cell platform. The main process included identification and isolation of single B cells; amplification and cloning of LIG1 antibody gene; expression, screening, and identification of antibody specificity. And this LIG1 antibody has been validated in ELISA, WB, IHC.