

Product datasheet for TP310760L

DNA Ligase I (LIG1) (NM_000234) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human ligase I, DNA, ATP-dependent (LIG1), 1 mg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC210760 representing NM_000234 Red=Cloning site Green=Tags(s)

MQRSIMSFHFKKKEGKAKKPEKEASNSSRETEPPPKAALKEWNGVSESDSPVKRPGRKAARVLGSEGEE
EDEALSPAKGQKPALDCSQVSPRPATSPENNASLSDTSPMDSSPSGIPKRRTARKQLPKRTIQEVLEEQ
SEDEDREAKRKKEEEEEETPKESLAEVATEKEGEDGDQPTTPPKPLKTSKAETPTESVSEPEVATKQE
LQEEEEQTKPPRRAPKTLSSFFTPRPAVKKEVEEPPGAPGKEGAAEGPLDPSGYNPAKNNYHPVEDAC
WKPGQKVPYLAVARTFEKIEVSARLRMVETLSNLLRSVVALSPPDLLPVLYLSLNLHLGPPQQGLELGVG
DGVLLKAVAQATGRQLESVRAEAAEKGDVGLVAENSRSTQRLMLPPPPLTASGVFSKFRDIARLTGSAST
AKKIDIIKGLFVACRHSEARFIARSLSGRLRLGLAEQSVLAALSQAVSLTPPGQEFPPAMVDAGKGKTAE
ARKTWLEEQGMILKQTFCEVPDLDRIPVLEHGLERLPEHCKLSPGIPKPLMAHPTRGISEVLKRFE
AAFTCEYKYDQRAQIHALEGGEVKIFSRNQEDNTGKYPDIISRIPKIKLPSVTSFILDEAVAWDREKK
QIQPFQVLTTRKRKEVDASEIQVQVCLYAFDLIYLNGLVREPLSRRRQLLRENFVETEGEFVATSLD
TKDIEQIAEFLEQSVKDSCEGLMVKTLVDVATYEIAKRSHNWLKLDYLDGVDGDTLDLVVIGAYLGRGK
RAGRYGGFLLASYDEDESEELQAICKLGTGFSDEELEEHHQSLKALVLPSPRPYVRIDGAVIPDHWLDP
SAVWEVKCADLSLSPIYPAARGLVSDKGISLRFPRFIRVREDKQPEQATTSAQVACLYRKQSQIQNQGED
SGSDPEDTY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

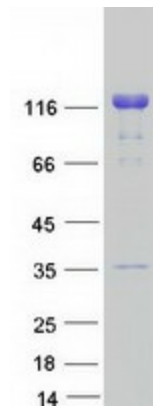
Tag:	C-Myc/DDK
Predicted MW:	101.6 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Bioactivity:	Enzyme activity (PMID: 25921062)



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Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	NP_000225
Locus ID:	3978
UniProt ID:	P18858
RefSeq Size:	3083
Cytogenetics:	19q13.33
RefSeq ORF:	2757
Summary:	This gene encodes a member of the ATP-dependent DNA ligase protein family. The encoded protein functions in DNA replication, recombination, and the base excision repair process. Mutations in this gene that lead to DNA ligase I deficiency result in immunodeficiency and increased sensitivity to DNA-damaging agents. Disruption of this gene may also be associated with a variety of cancers. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2014]
Protein Families:	Druggable Genome
Protein Pathways:	Base excision repair, DNA replication, Mismatch repair, Nucleotide excision repair

Product images:



Coomassie blue staining of purified LIG1 protein (Cat# [TP310760]). The protein was produced from HEK293T cells transfected with LIG1 cDNA clone (Cat# [RC210760]) using MegaTran 2.0 (Cat# [TT210002]).