

Product datasheet for PH310760

DNA Ligase I (LIG1) (NM_000234) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	LIG1 MS Standard C13 and N15-labeled recombinant protein (NP_000225)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC210760
Predicted MW:	101.6 kDa
Protein Sequence:	>RC210760 representing NM_000234 Red=Cloning site Green=Tags(s)

MQRSIMSFHFKKEGKAKKPEKEASNSSRETEPPPKAALKEWNGVSESDSPVKRPRKAARVLGSEGEE
EDEALSPAKGQKPALDCSQVSPRPATSPENNASLSDTSPMDSSPSGIPKRRRTARKQLPKRTIQEVLEEQ
SEDEDREAKRKEEEEEETPKESL TEAEVATEKEGEDGQPTTPPKPLKTSKAETPTESVSEPEVATKQE
LQEEEEQTKPRRAPKTLSSFFTPRKPAVKKEVKEEPEGAPGKEGAAEGPLDPSGYNPAKNNYHPVEDAC
WKPGQKVPYLAVARTFEKIEEVSARLRMVETLSNLLRSVVALSPDDLPLVLYLSLNLHGPPQGLGVLG
DGVLLKAVAQATGRQLESVRAEAAEKGDVGLVAENSRSTQRLMLPPPPLTASGVFSKFRDIARLTGSAST
AKKIDI IKGLFVACRHSEARFIARSLSGRLRLGLAEQSVLAALSQAVSLTPPGQEFPPAMVDAGKGTAE
ARKTWLEEQGMILKQTFCEVPDLDRIPVLLHGLERLPEHCKLSPGIPLKPLAHPTRGISEVLKRFEE
AAFTCEYKYDQRAQIHALEGGEVKIFSRNQEDNTGKYPDIISRIPKIKLPSVTSFILDTEAVAWDREKK
QIQPFVLTTRKRKEVDASEIQVQVCLYAFDLIYLNGLVREPLSRRRQLLRENFVETEGEFVFATSLD
TKDIEQIAEFLEQSVKDSCEGLMVKTLDVDATYEIAKRSHNWLKLLKDYLDGVDGDTLDLVVIGAYLGRGK
RAGRYGGFLLASYDEDESEELQAICKLGTGFSDDEELEEHHQSLKALVLPSPRPYVRIDGAVIPDHWLDPSA
VWEVKCADLSLSPYPAARGLVSDKGISLRFPRFIRVREDKQPEQATTSQVACLRYKQSQIQNQQGED
SGSDPEDTY

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- ¹³ C ₆ , ¹⁵ N ₄]-L-Arginine and [U- ¹³ C ₆ , ¹⁵ N ₂]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.



[View online »](#)

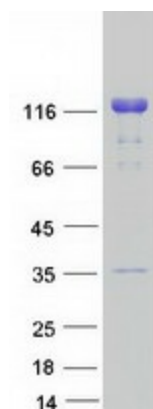
RefSeq:	NP_000225
RefSeq Size:	3083
RefSeq ORF:	2757
Locus ID:	3978
UniProt ID:	P18858
Cytogenetics:	19q13.33

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]).