

## Product datasheet for TP309530

### DNA Ligase III (LIG3) (NM\_013975) Human Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human ligase III, DNA, ATP-dependent (LIG3), nuclear gene encoding mitochondrial protein, transcript variant alpha, 20 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC209530 protein sequence Red=Cloning site Green=Tags(s)

MSLAFKIFFPQTLRALSRLKELCLFRKHHWRDVRQFSQWSETDLLHGHPLFLRRKPVLSFQGSHLRSRATY  
LVFLPGLHVGLCSGPCMAEQRFCVDYAKRGTAGCKKCKEKIVKGVCRIGKVVNPNPSES GGDMKEWYHI  
KCMFEKLERARATTKKIEDLTELEGWEELEDNEKEQITQHIADLSSKAAGTPKKKAVVQAKLTTTGQVTS  
PVKGASVFTSTNPRKFSGFSAPKPNNSGEAPSSPTPKRSLSSSKCDPRHKDCLLREFRKLCAVADNPSYN  
TKTQIIQDFLRKGSAGDGFHGDVYLVTKLLPGVIKTVYNLNDKQIVKLF SRIFNCNPDDMARDLEQGDV  
SETIRVFFEQSKSFPPAAKSLLLTIQEVDEFLLRLSKLTKEDQQALQDIASRCTANDLKCIIRLIKHDH  
KMNSGAKHVLDALDPNAYEAFKASRNLDVVERVLHNAQEVEKEPGQRRALSVAQLMTPVQPM LAEACK  
SVEYAMKKCPNGMFSEIKYDGERVQVHKNGDHFSYFSRSLKPVLPKHVAHF KDYIPQAFPGGHS MILDSE  
VLLIDNKTGKPLPFGTLGVHKKAAFQDANVCLFVFDYFNDVSLMDRPLCERRKFLHDNMVEIPNRIMF  
SEMKRVTKALDLADMITRVIQEGLEGLVLDKVKGTYPGKRHWLKVKKDYLNEGAMADTADLVVLGAFYG  
QGSKGGMMSIFLMGCYDPGSQKWCTVTKCAGGHDDATLARLQNELDMVKISKDPSKIPSWLKVNKIYYPD  
FIVDPKKA AVWEITGAEFSKSEAHTADGISIRFPRCTRIRDDKDWKSATNLPQLKELYQLSKEKADFTV  
VAGDEGSSTTGGSSSEENKGPSGSAVSRKAPSKPSASTKKAEGKLSNSNSKDGNMQTAKPSAMKVGEKLAT  
KSSPVKVG EKRAAETLCQTKVLLDIFTGVRLYLPSTPDFSRLRRYFVAFDGDVLVQEFDMTSATHVLG  
SRDKNPAAQQVSP EWIWACIRKRRLVAPC

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

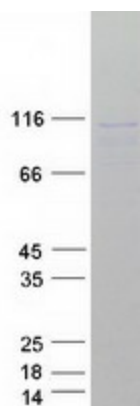
Tag:	C-Myc/DDK
Predicted MW:	108.6 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol



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<b>Preparation:</b>	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
<b>Note:</b>	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
<b>Storage:</b>	Store at -80°C.
<b>Stability:</b>	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
<b>RefSeq:</b>	<a href="#">NP_039269</a>
<b>Locus ID:</b>	3980
<b>UniProt ID:</b>	<a href="#">P49916</a>
<b>RefSeq Size:</b>	3722
<b>Cytogenetics:</b>	17q12
<b>RefSeq ORF:</b>	3027
<b>Synonyms:</b>	LIG2; LIG3alpha
<b>Summary:</b>	This gene is a member of the DNA ligase family. Each member of this family encodes a protein that catalyzes the joining of DNA ends but they each have a distinct role in DNA metabolism. The protein encoded by this gene is involved in excision repair and is located in both the mitochondria and nucleus, with translation initiation from the upstream start codon allowing for transport to the mitochondria and translation initiation from a downstream start codon allowing for transport to the nucleus. Additionally, alternate transcriptional splice variants, encoding different isoforms, have been characterized. [provided by RefSeq, Jul 2008]
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Base excision repair

### Product images:



Coomassie blue staining of purified LIG3 protein (Cat# TP309530). The protein was produced from HEK293T cells transfected with LIG3 cDNA clone (Cat# [RC209530]) using MegaTran 2.0 (Cat# [TT210002]).