

Product datasheet for **RC214927**

TDP1 (NM_018319) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TDP1 (NM_018319) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TDP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC214927 representing NM_018319
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTCTCAGGAAGGCGATTATGGGAGTGGACCATATCTAGTAGTGATGAAAGTGAGGAAGAAAAGCCAA
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 GTTTTACCTCCAAAAGGCAGAAAAGCGGTTCCAGGAGGACCTCGGCTGGTGTCTGTCCAGCAGTGATG
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 TGCTCCCAATGACGGCACTGCCAAAGAACTGAAAATCATGGCGCTCCCGCTGCCACAGGCTCAAAGAG
 GAGGAAGACGAGTATGAGACATCAGGGGAGGGCCAGGACATTTGGGACATGCTGGATAAAGGGAACCCCT
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 CTGTA AAAACAGTATCCACCAGAGTT CAGGAAGAAGCCAATCCTGCTTGTGCATGGTGATAAGCGAGAGG
 CTAAGGCTCACCTCCATGCCAGGCCAAGCCTTACGAGAACATCTCTCTGCCAGGCAAAGTTGGATAT
 TGCGTTTGGAAACACACCACGAAAATGATGCTGCTGCTATGAAGAAGGCCTCCGGTTGTCATACAC
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 GCTGGCAGCCAGGAGCCAATGGCCACCTTCTGTGCCATATGATTTGCCTCCAGAACTGTATGGAAGTA
 AAGATCGCCATGGATATGGAACATTCTTATGTCAAAGCACCGGATACGCATGGGAACATGTGGGTGCC
 CTCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC214927 representing NM_018319
 Red=Cloning site Green=Tags(s)

MSQEGDYGRWTISSSDESEEEKPKPDKPSTSSLLCARQGAANEPRYTCSEAQKAAHKRKISPVKFSNTDS
 VLPPKRQKSGSQEDLGWCLSSSDELQPEMPQKQAEKVVIKKEKDISAPNDGTAQR TENHGAPACHRLKE
 EEDEYETSGEGQDIWMLDKGNPFQFYLRVSVGPKPYNSGALHIKDILSPLFGTLVSSAQFNFCFDVDW
 LVKQYPPEFRKPIILLVHGDKREAKAHLHAQAKPYENISLQAKLDIAFGTHHTKMMLLLYEEGLRVVIH
 TSNLIHADWHQKTQGIWLSPLYPRIADGTHKSGESPTHFKADLISYLMAYNAPSLKEWIDVIHKHDLSET
 NVVYLIGSTPGRFQGSQKDNWGHFRLKLLKDHASSMPNAESWPVVGQFSSVGS LGADESKWLCSEFKESM
 LTLGKESKTPGKSSVPLYLIYPSVENVRTSLEGPAGGSLPYSIQTAEKQNLHSHYFHKWSAETSGRSNA
 MPHIKTYMRSPDFSKIAWFLVTSANLSKAAWGALEKNGTQLMIRSYELGVLFLPSAFGLDSFKVKQKFF
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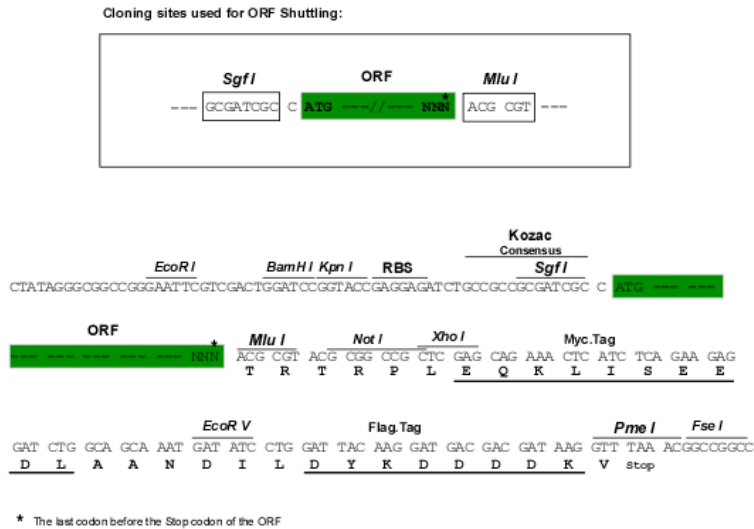
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6249_h03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_018319

ORF Size: 1824 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_018319.4](#)

RefSeq Size: 3763 bp

RefSeq ORF: 1827 bp

Locus ID: 55775

UniProt ID: [Q9NUW8](#)

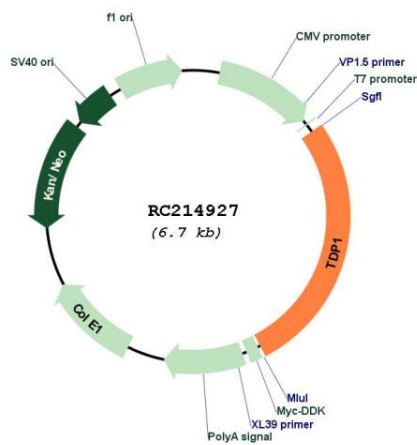
Cytogenetics: 14q32.11

Protein Families: Druggable Genome

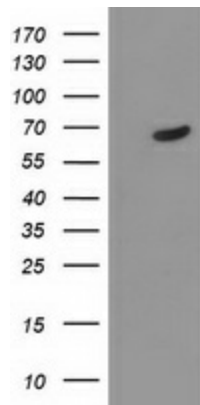
MW: 68.2 kDa

Gene Summary: The protein encoded by this gene is involved in repairing stalled topoisomerase I-DNA complexes by catalyzing the hydrolysis of the phosphodiester bond between the tyrosine residue of topoisomerase I and the 3-prime phosphate of DNA. This protein may also remove glycolate from single-stranded DNA containing 3-prime phosphoglycolate, suggesting a role in repair of free-radical mediated DNA double-strand breaks. This gene is a member of the phospholipase D family and contains two PLD phosphodiesterase domains. Mutations in this gene are associated with the disease spinocerebellar ataxia with axonal neuropathy (SCAN1). [provided by RefSeq, Aug 2016]

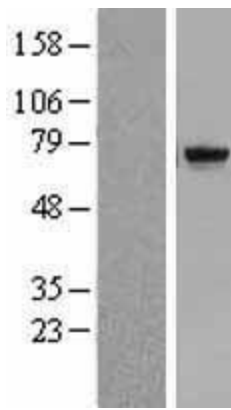
Product images:



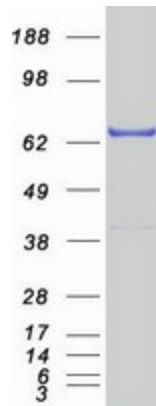
Circular map for RC214927



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY TDP1 (Cat# RC214927, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-TDP1 (Cat# [TA503768]). Positive lysates [LY413162] (100ug) and [LC413162] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY413162]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC214927 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified TDP1 protein (Cat# [TP314927]). The protein was produced from HEK293T cells transfected with TDP1 cDNA clone (Cat# RC214927) using MegaTran 2.0 (Cat# [TT210002]).