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Product datasheet for RC201888

TDP1 (NM_001008744) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TDP1 (NM_001008744) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TDP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC201888 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCTCAGGAAGGCGATTATGGGAGGTGGACCATATCTAGTAGTGATGAAAGTGAGGAAGAAAAGCCAA
AACCAGACAAGCCATCTACCTCTTCTCTTCTCTGTGCCAGGCAAGGAGCAGCAAATGAGCCCAGGTACAC
CTGTTCCGAGGCCCAGAAAGCTGCACACAAGAGGAAAATATCACCTGTGAAATTCAGCAATACAGATTCA
GTTTTACCTCCCAAAAGGCAGAAAAGCGGTTCCCAGGAGGACCTCGGCTGGTGTCTGTCCAGCAGTGATG
ATGAGCTGCAACCAGAAATGCCGCAGAAGCAGGCTGAGAAAGTGGTGATCAAAAAGGAGAAAGACATCTC
TGCTCCCAATGACGGCACTGCCCAAAGAACTGAAAATCATGGCGCTCCCGCCTGCCACAGGCTCAAAGAG
GAGGAAGACGAGTATGAGACATCAGGGGAGGGCCAGGACATTTGGGACATGCTGGATAAAGGGAACCCCT
TCCAGTTTTACCTCACTAGAGTCTCTGGAGTTAAGCCAAAGTATAACTCTGGAGCCCTCCACATCAAGGA
TATTTTATCTCCTTTATTTGGGACGCTTGTTTCTTCAGCTCAGTTTAACTACTGCTTTGACGTGGACTGG
CTCGTAAAACAGTATCCACCAGAGTTCAGGAAGAAGCCAATCCTGCTTGTGCATGGTGATAAGCGAGAGG
CTAAGGCTCACCTCCATGCCCAGGCCAAGCCTTACGAGAACATCTCTCTCTGCCAGGCAAAGTTGGATAT
TGCGTTTGGAACACACCACACGAAAATGATGCTGCTGCTCTATGAAGAAGGCCTCCGGGTTGTCATACAC
ACCTCCAACCTCATCCATGCTGACTGGCACCAGAAAACTCAAGGAATATGGTTGAGCCCCTTATACCCAC
GAATTGCTGATGGAACCCACAAATCTGGAGAGTCGCCAACACATTTTAAAGCTGATCTCATCAGTTACTT
GATGGCTTATAATGCCCCTTCTCTCAAGGAGTGGATAGATGTCATTCACAAGCACGATCTCTCTGAAACA
AATGTTTATCTTATTGGTTCAACCCCAGGACGCTTTCAAGGAAGTCAAAAAGATAATTGGGGACATTTTA
GACTTAAGAAGCTTCTGAAAGACCATGCCTCATCCATGCCTAACGCAGAGTCCTGGCCTGTCGTAGGTCA
GTTTTCAAGCGTTGGCTCCTTGGGAGCCGATGAATCAAAGTGGTTATGTTCTGAGTTTAAAGAGAGCATG
CTGACACTGGGGAAGGAAAGCAAGACTCCAGGAAAAAGCTCTGTTCCTCTTTACTTGATCTATCCTTCTG
TGGAAAATGTGCGGACCAGTTTAGAAGGATATCCTGCTGGGGGCTCTCTTCCCTATAGCATCCAGACAGC
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ATGCCACATATTAAGACATATATGAGGCCTTCTCCAGACTTCAGTAAAATTGCTTGGTTCCTTGTCACAA
GCGCAAATCTGTCCAAGGCTGCCTGGGGAGCATTGGAGAAGAATGGCACCCAGCTGATGATCCGCTCCTA
CGAGCTCGGGGTCCTTTTCCTCCCTTCAGCATTTGGTCTAGACAGTTTCAAAGTGAAACAGAAGTTCTTC
GCTGGCAGCCAGGAGCCAATGGCCACCTTTCCTGTGCCATATGATTTGCCTCCAGAACTGTATGGAAGTA
AAGATCGGCCATGGATATGGAACATTCCTTATGTCAAAGCACCGGATACGCATGGGAACATGTGGGTGCC
CTCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC201888 protein sequence
Red=Cloning site Green=Tags(s)

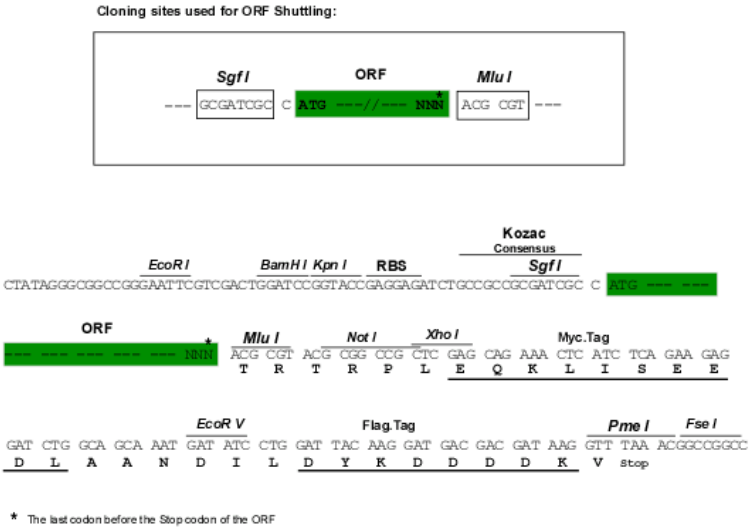
MSQEGDYGRWTISSSDESEEEKPKPDKPSTSSLLCARQGAANEPRYTCSEAQKAAHKRKISPVKFSNTDS
VLPPKRQKSGSQEDLGWCLSSSDDELQPEMPQKQAEKVVIKKEKDISAPNDGTAQRTENHGAPACHRLKE
EEDEYETSGEGQDIWDMLDKGNPFQFYLTRVSGVKPKYNSGALHIKDILSPLFGTLVSSAQFNYCFDVDW
LVKQYPPEFRKKPILLVHGDKREAKAHLHAQAKPYENISLCQAKLDIAFGTHHTKMMLLLYEEGLRVVIH
TSNLIHADWHQKTQGIWLSPLYPRIADGTHKSGESPTHFKADLISYLMAYNAPSLKEWIDVIHKHDLSET
NVYLIGSTPGRFQGSQKDNWGHFRLKKLLKDHASSMPNAESWPVVGQFSSVGSLGADESKWLCSEFKESM
LTLGKESKTPGKSSVPLYLIYPSVENVRTSLEGYPAGGSLPYSIQTAEKQNWLHSYFHKWSAETSGRSNA
MPHIKTYMRPSPDFSKIAWFLVTSANLSKAAWGALEKNGTQLMIRSYELGVLFLPSAFGLDSFKVKQKFF
AGSQEPMATFPVPYDLPPELYGSKDRPWIWNIPYVKAPDTHGNMWVPS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

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

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001008744

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_001008744.2

RefSeq Size: 3540 bp

RefSeq ORF: 1827 bp

Locus ID: 55775

UniProt ID: Q9NUW8

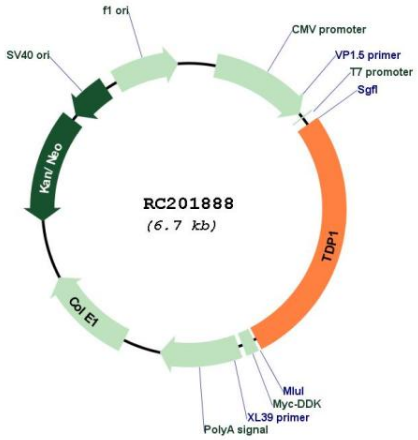
Cytogenetics: 14q32.11

Protein Families: Druggable Genome

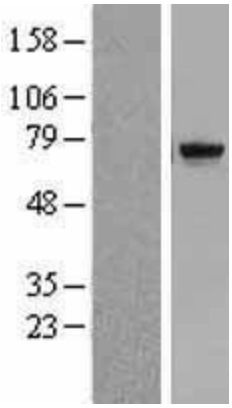
MW: 68.4 kDa

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]

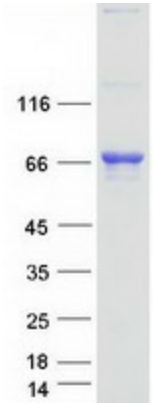
Product images:



Circular map for RC201888



Western blot validation of overexpression lysate (Cat# [LY413162]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected 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# [TP301888]). The protein was produced from HEK293T cells transfected with TDP1 cDNA clone (Cat# RC201888) using MegaTran 2.0 (Cat# [TT210002]).