

## Product datasheet for **RR211578**

### Tdp1 (NM\_001031657) Rat Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Tdp1 (NM_001031657) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Tdp1
Synonyms:	MGC112732
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

**ORF Nucleotide Sequence:**

>RR211578 representing NM\_001031657  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGTCCCAGGAAAGCAGCTACGAAAAGTGGACAATATCCAGTAGTGACGACAGCGAGGATGAAAAGCCCA  
 AACCTGTCAAACCATCAACATCCTCTGGCCCCAGGCTGGGCAGGAGTGTGCAAGGAGCCACGTACAC  
 CTGCTCAGAGGCCCGCAAGGCTGCACACAAGAGACAGATCTCACCTGTGAAATCAACAACACAGACTCC  
 GTGTTACCCACAGAAGCAGAAGATGGATTCCCCGGAAGGTCTGGGCTGGTGTCTGTCCAGCAGCGATG  
 ATGAGCAGCAGCCGGATGTGACACAGCAGGAGCAGCCTAAGGGAGTGCCACCTCAAGAGAAAAAATATGC  
 CCCCTCAGCCAATGTGACTACTGCCAGAAAGTTGAGGATCGAAGCCCTCCTGACAGCCATAGGGCCCAA  
 AGGGCAGACGAAGAGTACGAGACCTCAGGGGAAGGCCAGGACATCTGGGACATGTGGATAAGGAGAACC  
 CCTTCCAGTTTTATCTCACTAGAGTCTCGGGGATTAAGGCAAAGTACAACCTCAAAGCCCTCCACATCAA  
 GGATTTTTATCCCCTCTGTTTGGGACACTTGTCTCTTCAGCTCAGTTTAACTACTGCTTTGATGTGAAC  
 TGGCTCATAAAGCAATATCCACCAGAATTCAGGAAGAAGCCGATCCTGCTTGTGCACGGCGATAAGAGGG  
 AAGCCAAGGCAGACTTGCATGCCAGGCCAAGCCCTATGCAAACATTTCCCTCTGCCAGGCAAAGTTGGA  
 TATTGCATTTGGAACACACCACAGAAAATGATGCTCTTGCTCTATGAAGAAGGCCCTCCGAGTCGTCATC  
 CACACCTCCAACCTCATCCGGGAAGACTGGCACCAGAAAACCCAAAGGAATATGGTTGAGCCCTTTGTACC  
 CACGAATTTACCAGGGAACACACATCCGGAGAGTCAAGCACCCATTTCAAAGCGGACCTCACCAGTTA  
 TTTGATGGCGTAAATGCCCCCTCTCCAGGAATGGATAGACATCATCCAAGAACACGATCTCTCTGAA  
 ACCAATGTTTACCTTATGGTTCAACCCCTGGACGCTTCAAGGAAGTCAAAAGATAATTGGGGACATT  
 TTAGACTTAGAAAAGCTTCTGCAGGCGCATGCCCATCTGCACCCAGGGGCGAGTGTGCCCGCTCGTGGG  
 TCAGTTTTCAAGCATGGCTCCCTGGGGCTGATGAATCCAAGTGGTTGTGCTCAGAGTTTAAAGAGAGC  
 TTGCTGGCAGTGAGAGAGGAAGGCCGACCCCGGCAGAAAGCGCAGTTCTCTTCTCATCTGATCTATCCCT  
 CTGTGGAAAATGTGCGGACCAGCTTAGAAGGATATCCTGCTGGGGCTCTCTTCCCTATGGCATCCAGAC  
 GGCTGAGAAAACAGAGGTGGCTGCACCCCTACTTCCACAAGTGGTCAAGAGAGACATCCGGCCGAAGCAAT  
 GCCATGCCACATATTAAGACGTACATGAGGCCCTCACCAGACTTCAGTAAACTGGCTTGGTTCTTGTCA  
 CAAGTGCAATCTGTCCAAGGCTGCCTGGGAGCACTGGAGAAGAAGCGGCTCAACTGATGATCCGCTC  
 CTATGAGCTGGGGTCTTTTCTCCCTCGGCCCTTTGGCCTGGACACCTTCAAAGTGAACAGAAAATTC  
 TTCTCCAGCAGCAGTGAAGCAATGGCCTCTTTCTGTGCCATGACCTGCCCCAGAGCTCTACGGGA  
 GTAAAGATCGGCCATGGATTGGAACATTCCTATGTCAAAGCACAGACACATGGCAACATGTGGGT  
 GCCCTCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RR211578 representing NM\_001031657  
 Red=Cloning site Green=Tags(s)

MSQESSYGKWTISSDSEDEKPKVPKPTSSGPQAGQGVSKPTTYTCEARKAAHKRQISPVKFNNTDS  
 VLPHKKQKMSPEGLGWCLSSDDEQPPDVTQQEQPKGVPPQEKKYAPSANVTTAQKVEDRSPDASHRAQ  
 RADEEYETSGEGQDIWMLDKENPFQFYLTRVSGIKAKYNSKALHIKDILSPLFGTLVSSAQFNFCFDVN  
 WLKQYPPFRKPIILLVHGDKREAKADLHAQAKPYANISLQAKLDIAFGTHHTKMMLLLYEEGLRVVI  
 HTSNLIREDWHQKTQGIWLSPLYPRIYQGNHTSGESSTHFADLTSYLMAYNAPPLQEWIDIIQEHDLSE  
 TNVYLIGSTPGRFQGSKDNWGHFRLKLLQAHAPSAPRGECWPVVGQFSSIGSLGPDESKWLCSEFKES  
 LLAVREEGRTPGRSAVPLHLIYPSVENVRTSLEGYPPAGGSLPYGIQTAEKQRWLHPYFHKWSAETSGRSN  
 AMPHIKTYMRSPDFSKLAWFLVTSANLSKAAWGALEKNGAQLMIRSYELGVLFLPSAFGLDTFKVKQKF  
 FSSSEPMASFPVYDLPELYGSKDRPWIWNIPIYVKAPDTHGNMWPVS

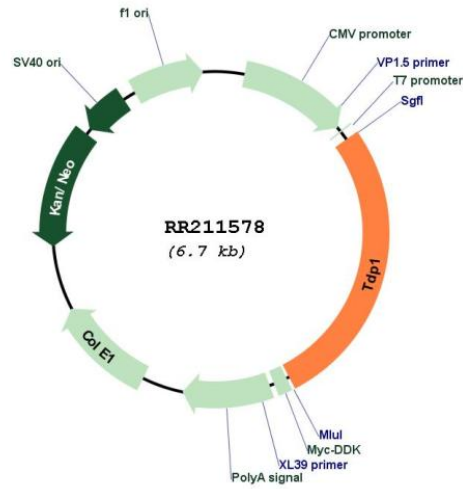
**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM\_001031657

ORF Size: 1827 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001031657.1</a> , <a href="#">NP_001026827.1</a>
<b>RefSeq Size:</b>	2096 bp
<b>RefSeq ORF:</b>	1830 bp
<b>Locus ID:</b>	314380
<b>UniProt ID:</b>	<a href="#">Q4G056</a>
<b>Cytogenetics:</b>	6q32
<b>MW:</b>	68.6 kDa
<b>Gene Summary:</b>	DNA repair enzyme that can remove a variety of covalent adducts from DNA through hydrolysis of a 3'-phosphodiester bond, giving rise to DNA with a free 3' phosphate. Catalyzes the hydrolysis of dead-end complexes between DNA and the topoisomerase I active site tyrosine residue. Hydrolyzes 3'-phosphoglycolates on protruding 3' ends on DNA double-strand breaks due to DNA damage by radiation and free radicals. Acts on blunt-ended double-strand DNA breaks and on single-stranded DNA. Has low 3'exonuclease activity and can remove a single nucleoside from the 3'end of DNA and RNA molecules with 3'hydroxyl groups. Has no exonuclease activity towards DNA or RNA with a 3'phosphate (By similarity). [UniProtKB/Swiss-Prot Function]