

## Product datasheet for **MG208862**

### Parp2 (NM\_009632) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Parp2 (NM_009632) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Parp2
Synonyms:	Adprt2; Adprt12; ARTD2; Aspart12; C78626; PARP-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG208862 representing NM\_009632  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGCGCCGCGGCCGAGAGATCAGGCTCTGGAAGCGAGTGCTAAATGAAGCCAAGAAAGTTGATAATG  
 GCAACAAAGCAACAGAAGACGACTCTCCTCTGGCAAGAAGATGCGCACGTGCCAGAGAAAAGGCCCTAT  
 GGCTGGAGGGAAGGACGACAGACAGGACAAAAGACAATCGAGACTCTGTGAAGACCTTGCTGTAAAGGGC  
 AAAGCCCCCTGTGGACCCAGAGTGTGACGCCAAGCTGGGAAAGGCTCATGTGTATTGTGAAGGAGATGATG  
 TCTATGATGTCATGCTAAATCAAACCAATCTCCAGTTCAACAACAACAAGTACTACCTTATTTCAGCTGTT  
 AGAAGATGATGCCAGAGGAACCTCAGTGTGGATGAGGTGGGCGGAGTTGGAAAGACGGGGCAGCAC  
 AGCTTGGTGACTTGTCTGGTGACCTCAACAAAGCAAAAGAAATATTTTCAGAAAAATTCCTTGACAAAA  
 CTAACAAACAAATGGGAGGACCGTGAGAATTTGAAAAAGTACCTGGAAAAACGACATGTTACAGATGGA  
 CTATGCTGCCAGCACGCAGGATGAAAGTAAAACAAAAGAAGAGGAACTTTGAAGCCTGAGTCTCAGCTG  
 GATCTTCGAGTCCAGGAGCTGCTAAAGTTGATCTGTAACGTGCAGACCATGGAAGAAATGATGATTGAGA  
 TGAAGTATGACACCAAGAGAGCCCCGCTTGAAAGCTGACAGTGGCGCAAATCAAGGCCGGTTACAGTC  
 TCTCAAGAAGATTGAGGACTGCATCCGCGCTGGCCAGCATGGGCGAGCGCTTGTGAAGCGTGCAATGAA  
 TTCTACACCAGGATCCCTCATGACTTTGGACTCTCCATCCCTCCAGTAATCCGGACAGAGAAGGAACTGT  
 CAGACAAAGTAAAAGTGTAGAGGCATTGGGAGACATTGAAATGGCCCTAAACTGGTGAAGTCAGAGCG  
 CCAAGGCCCTAGAACCCACTGGACCAACTATAGAAACCTACACTGTGCTTTGCGTCTCTGGACCAT  
 GAAAGTAAAGGTTAAGGTGATTTCTCAGTACCTACAGTCTACGCATGCTCTACACACAAGGACTATA  
 CTATGACCTTGTGGATGTTTTGCAAGTAGAGAAGGAAGGAGAAAGAGGCCCTCAGGGAGGACCTCC  
 TAACAGGATGCTGCTCTGGCATGGATCCAGGCTGAGTAACCTGGTGGGGATCCTGAGCCACGGGCTTAGA  
 GTTGCCCCACCTGAGGCTCCCATCACAGGTTATATGTTTGGAAAAGGAATCTACTTTGCTGACATGCTCT  
 CCAAGAGTGCCAATTACTGCTTTGCCTCTCGCCTAAAGAATACAGGATTGCTTCTTCTGTGAGAGGTAGC  
 TCTAGGTCAGTGAATGAACTACTGGAGGCCAATCCTAAAGCACAAGGATTGCTTCGGGGCAAGCATAGC  
 ACCAAGGGGATGGGAAAGATGGCTCCAGCCCTGCCACTTCATACCCTGAATGGGAGTACAGTGCCTT  
 TAGGACCAGCAAGTGACACAGGAATCTCAATCCAGAGGGGTACACCCTCAACTACAATGAGTTTATTGT  
 TTATAGCCCCAACCAAGGTCGGTATGCGATACCTTCTAAAGATTCAATTTAACTTCTGCAGCTATGG

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:**

>MG208862 representing NM\_009632  
 Red=Cloning site Green=Tags(s)

MAPRRQRSGSRRVLEAKKVDNNGKATEDDSPGKMMRTCQRKGPMAAGKADRTKDNRDSVKTLKLLKG  
 KAPVDPECAAKLGAHVYCEGDDYDVMLNQTNLQFNKYYLIQLLEDDAQRNFSVWWRWGRVGTGQH  
 SLVTCSGDLNKAKEIFQKFLDKTKNNWEDRENFEKVPKYDMLQMDYAASTQDESKTKEEETLKPESQL  
 DLRVQELLKLIKENVQTEEMMIEMKYDTKRAPLGLTVAQIKAGYQSLKKIEDCIRAGQHGRALVEACNE  
 FYTRIPHDFGLSIPPVIRTEKELSDKVKLLEALGDIEIALKLVKSERQGLEHPLDQHYRNLHLCALRPLDH  
 ESNEFKVISQYLQSTHAPTHKDYMTLLDVFEVEKEGEKEAFREDLPNRMLLWHGSRLSNWVGILSHGLR  
 VAPPEAPITGYMFGKGIYFADMSSKSANYCFASRLKNTGLLLLSEVALGQCNELLEANPKAQGLLRGKHS  
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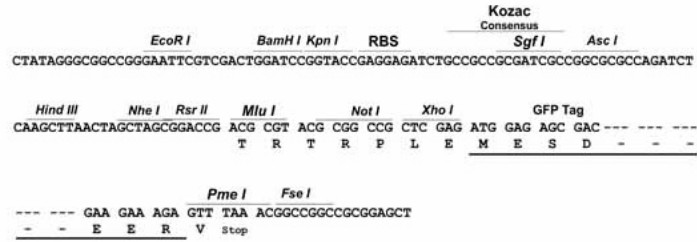
**TRTRPLE** - GFP Tag - V

**Restriction Sites:**

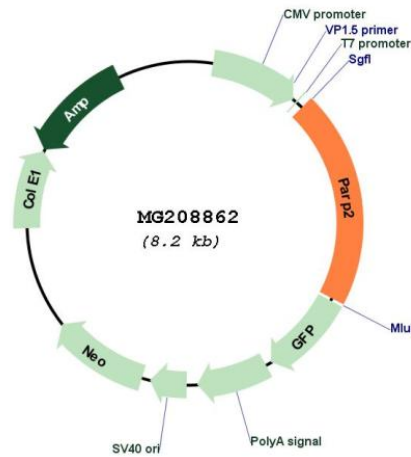
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



<b>ACCN:</b>	NM_009632
<b>ORF Size:</b>	1677 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_009632.3</a>
<b>RefSeq Size:</b>	1834 bp
<b>RefSeq ORF:</b>	1680 bp
<b>Locus ID:</b>	11546
<b>UniProt ID:</b>	<a href="#">O88554</a>
<b>Cytogenetics:</b>	14 C1
<b>Gene Summary:</b>	<p>Poly-ADP-ribosyltransferase that mediates poly-ADP-ribosylation of proteins and plays a key role in DNA repair (PubMed:10364231). Mainly mediates glutamate and aspartate ADP-ribosylation of target proteins: the ADP-D-ribosyl group of NAD(+) is transferred to the acceptor carboxyl group of glutamate and aspartate residues and further ADP-ribosyl groups are transferred to the 2'-position of the terminal adenosine moiety, building up a polymer with an average chain length of 20-30 units (By similarity). ADP-ribosylation follows DNA damage and appears as an obligatory step in a detection/signaling pathway leading to the reparation of DNA strand breaks (PubMed:10364231). Also mediates serine ADP-ribosylation of target proteins following interaction with HPF1; HPF1 conferring serine specificity (By similarity). In addition to proteins, also able to ADP-ribosylate DNA: preferentially acts on 5'-terminal phosphates at DNA strand breaks termini in nicked duplex (By similarity).</p> <p>[UniProtKB/Swiss-Prot Function]</p>