

Product datasheet for **MR208862**

Parp2 (NM_009632) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Parp2 (NM_009632) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Parp2
Synonyms:	Adprt2; Adprt12; ARTD2; Aspart12; C78626; PARP-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR208862 representing NM_009632
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCCCGCGGGCGGAGAGATCAGGCTCTGGAAGCGAGTGCTAAATGAAGCCAAGAAAGTTGATAATG
 GCAACAAAGCAACAGAAGACGACTCTCCTCTGGCAAGAAGATGCGCACGTGCCAGAGAAAAGGCCCTAT
 GGCTGGAGGGAAGGACGACAGACAGGACAAAAGACAATCGAGACTCTGTGAAGACCTTGCTGTAAAGGGC
 AAAGCCCTGTGGACCCAGAGTGTGACGCAAGCTGGGAAAGGCTCATGTGTATTGTGAAGGAGATGATG
 TCTATGATGTCATGCTAAATCAAACCAATCTCCAGTTCACAACAACAAGTACTACCTTATTACAGCTGT
 AGAAGATGATGCCAGAGGAACCTCAGTGTGGATGAGGTGGGCGGAGTTGGAAAGACGGGCGAGCAC
 AGCTTGGTGACTTGTCTGGTGACCTCAACAAAGCAAAAGAAATATTTTCAGAAAAATTCCTTGACAAAA
 CTAACAAACAAATGGGAGGACCGTGAAGACTTTGAAAAAGTACCTGGAAAAACGACATGTTACAGATGGA
 CTATGCTGCCAGCACGCAGGATGAAAGTAAAACAAAAGAAGAGGAACTTTGAAGCCTGAGTCTCAGCTG
 GATCTTCGAGTCCAGGAGCTGCTAAAGTTGATCTGTAACGTGCAGACCATGGAAGAAATGATGATTGAGA
 TGAAGTATGACACCAAGAGAGCCCCGCTTGAAAGCTGACAGTGGCGCAAATCAAGGCCGGTTACAGTC
 TCTCAAGAAGATTGAGGACTGCATCCGCGCTGGCCAGCATGGGCGAGCGCTTGTGAAGCGTGCAATGAA
 TTCTACACCAGGATCCCTCATGACTTTGGACTCTCCATCCCTCCAGTAATCCGGACAGAGAAGGAACTGT
 CAGACAAAGTAAAAGTGTAGAGGCATTGGGAGACATTGAAATGGCCCTAAACTGGTGAAGTCAGAGCG
 CCAAGGCCCTAGAACCCCACTGGACCAACTATAGAAACCTACACTGTGCTTTGCGTCTCTGGACCAT
 GAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAG
 CTATGACTTGTGGATGTTTTGCAAGTAGAGAAGGAAGGGGAGAAAGAGGCCCTCAGGGAGGACCTTCC
 TAACAGGATGCTGCTCTGGCATGGATCCAGGCTGAGTAACCTGGTGGGGATCCTGAGCCACGGGCTTAGA
 GTTGCCCCACCTGAGGCTCCCATCACAGGTTATATGTTTGGAAAAGGAATCTACTTTGCTGACATGCTCT
 CCAAGAGTGCCAATTACTGCTTTGCCTCTCGCCTAAAGAATACAGGATTGCTTCTTCTGTGAGAGGTAGC
 TCTAGGTCAGTGAATGAACTACTGGAGGCCAATCCTAAAGCACAAGGATTGCTTCGGGGCAAGCATAGC
 ACCAAGGGGATGGGAAAGATGGCTCCAGCCCTGCCACTTCATCACCTGAATGGGAGTACAGTGCCTT
 TAGGACCAGCAAGTGACACAGGAATTCTCAATCCAGAGGGGTACACCCTCAACTACAATGAGTTTATTGT
 TTATAGCCCCAACCAAGGTCGGTATGCGATACCTTCTAAAGATTCAATTTAACTTCTGCAGCTATGG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR208862 representing NM_009632
 Red=Cloning site Green=Tags(s)

MAPRRQRSGSRRVLNEAKKVDNNGKATEDDSPPGKMRCTCQRKQPMAGGKDADRTKDNDRSVKTLKLLKG
 KAPVDPECAAKLGAHVYCEGDDVYDVMLNQTNLQFNNNKYLLIQLLEDDAQRNFSVWMRWGRVGTGQH
 SLVTCSGDLNKAKEIFQKKFLDKTKNNWEDRENFEKVPKYDMLQMDYAASTQDESKTKEEETLKPESQL
 DLRVQELLKLIKCNVQTEEMMIEMKYDTKRAPLGKLTVAQIKAGYQSLKKIEDCIRAGQHGRALVEACNE
 FYTRIPHDFGLSIPPVIRTEKELSDKVKLLEALGDIEIALKLVKSERQGLEHPLDQHYRNLHCLRPLDH
 ESNEFKVISQYLQSTHAPTHKDYMTLLDVFEVEKEGEKEAFREDLPNRMLLWHGSRLSNWVGILSHGLR
 VAPPEAPITGYMFGKGIYFADMSKSSANYCFASRLKNTGLLLLSEVALGQCNELLEANPKAQGLLRGKHS
 TKGMGMAPSPAHFITLNGSTVPLGPASDTGILNPEGYTLNLYNEFIVYSPNQVRMRYLLKIQFNFLQLW

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

ACCN: NM_009632

ORF Size: 1677 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_009632.3](#)
RefSeq Size: 1834 bp

RefSeq ORF: 1680 bp

Locus ID: 11546

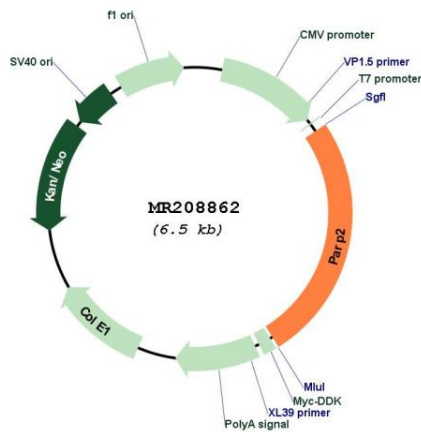
UniProt ID: [O88554](#)

Cytogenetics: 14 C1

MW: 63.8 kDa

Gene Summary: 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). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR208862