

Product datasheet for RC207085

PARP1 (NM_001618) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PARP1 (NM_001618) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PARP1
Synonyms:	ADPRT; ADPRT 1; ADPRT1; ARTD1; pADPRT-1; PARP; PARP-1; PPOL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC207085 representing NM_001618 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGGAGTCTTCGGATAAGCTCTATCGAGTCGAGTACGCCAAGAGCGGGCGGCCTCTTGCAAGAAAT
GCAGCGAGAGCATCCCCAAGGACTCGCTCCGGATGGCCATCATGGTGCAGTCGCCATGTTTGATGGAAA
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GTGGATGGGTTCTCTGAGCTTCGGTGGGATGATCAGCAGAAAGTCAAGAAGACAGCGGAAGCTGGAGGAG
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Protein Sequence:

>RC207085 representing NM_001618
 Red=Cloning site Green=Tags(s)

MAESSDKLYRVEYAKSGRASCKKCSSEIPKDSLRLMAIMVQSPMFDGKVPWHYHFSFVKVGHHSIRHPDVE
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 REGECQRYKPFKQLHNRRLWHGSRTTNFAGILSQLRIAPPEAPVTGYMFGKGIYFADMVSKSANYCHT
 SQGDPIGLILLGEVALGNMYELKHASHISKLPKGKHSVKGLGKTPDPSANISLDGVDVPLGTGISSGVN
 DTSLLYNEYIVYDIAQVNLKYLKLFNFKTSW

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mg3566_a02.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:



ACCN: NM_001618

ORF Size: 3042 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

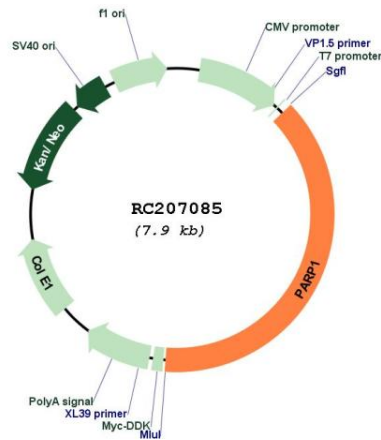
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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.

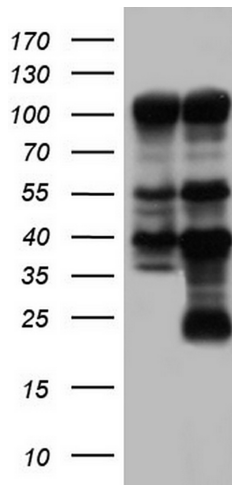
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	<ol style="list-style-type: none">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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_001618.3
RefSeq Size:	3859 bp
RefSeq ORF:	3045 bp
Locus ID:	142
UniProt ID:	P09874
Cytogenetics:	1q42.12
Domains:	PARP, BRCT, zf-PARP, PARP_reg
Protein Families:	Druggable Genome, Stem cell - Pluripotency, Transcription Factors
Protein Pathways:	Base excision repair
MW:	112.9 kDa
Gene Summary:	This gene encodes a chromatin-associated enzyme, poly(ADP-ribose)transferase, which modifies various nuclear proteins by poly(ADP-ribose)ation. The modification is dependent on DNA and is involved in the regulation of various important cellular processes such as differentiation, proliferation, and tumor transformation and also in the regulation of the molecular events involved in the recovery of cell from DNA damage. In addition, this enzyme may be the site of mutation in Fanconi anemia, and may participate in the pathophysiology of type I diabetes. [provided by RefSeq, Jul 2008]

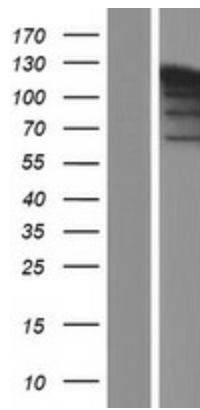
Product images:



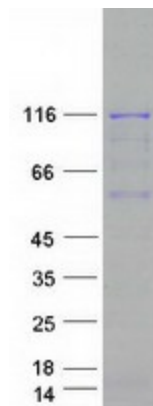
Circular map for RC207085



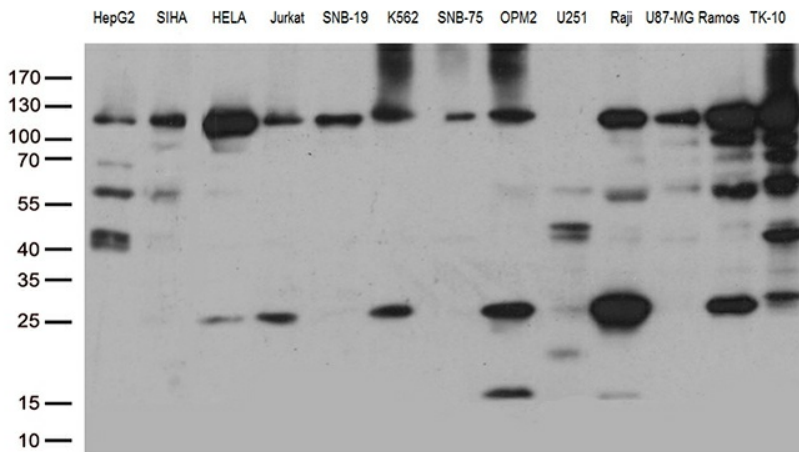
HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PARP1 (Cat# RC207085, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PARP1 (Cat# [TA804938]). Positive lysates [LY400609] (100ug) and [LC400609] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY400609]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC207085 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PARP1 protein (Cat# [TP307085]). The protein was produced from HEK293T cells transfected with PARP1 cDNA clone (Cat# RC207085) using MegaTran 2.0 (Cat# [TT210002]).



Western blot analysis of extracts (50ug per lane) from 13 cell lines lysates by using anti-PARP1 monoclonal antibody([TA804938])