

Product datasheet for **RG218510**

Perforin (PRF1) (NM_005041) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Perforin (PRF1) (NM_005041) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Perforin
Synonyms:	HPLH2; P1; PFP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG218510 representing NM_005041
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCAGCCCGTCTGCTCCTCTGGGCATCCTTCTCTGCTGCTGCCCTGCCCGTCCCTGCCCCGTGCC
 ACACAGCCGCACGCTCAGAGTGCAAGCGCAGCCACAAGTTCGTGCCTGGTGCATGGCTGGCCGGGAGGG
 TGTGGACGTGACCAGCCTCCGCCCTCGGGCTCCTTCCAGTGGACACACAAAGTTCTGCGGCCCGAC
 GGCACCTGCACCCTCTGTGAAAATGCCCTACAGGAGGGCACCCCTCCAGCGCCTGCCTCTGGCGCTACCA
 ACTGGCGGGCCAGGGCTCTGGCTGCCAGCGCCATGTAACCAGGGCCAAAGTCAGCTCCACTGAAGCTGT
 GGCCCGGGATGCGGCTCGTAGCATCCGCAACGACTGGAAGGTGGGCTGGACGTGACTCCTAAGCCACC
 AGCAATGTGCATGTGTCTGTGGCCGCTCACACTCACAGGCAGCCAACTTTCAGCCCAGAAGCCACC
 AGGACCAGTACAGCTTACGACTGACACGGTGGAGTGGCGTTTACAGTTTCCATGTGGTACACACTCC
 CCCGCTGCACCCTGACTTCAAGAGGGCCCTCGGGACCTGCCCCACCCTTCAACGCCTCCACCCAGCCC
 GCCTACCTCAGGCTTATCTCCAACCTACGGCACCCACTTCAATCCGGGCTGTGGAGCTGGGTGGCCGATAT
 CGGCCCTCACTGCCCTGCGCACCTGCGAGCTGGCCCTGGAAGGGCTCACGGACAACGAGGTGGAGGACTG
 CCTGACTGTGAGGCCAGGTCAACATAGGCATCCACGGCAGCATCTCTGCCGAAGCCAAGGCCTGTGAG
 GAGAAGAAGAAGAAGCACAAGATGACGGCCTCCTTCCACCAAACCTACCGGGAGCGCCACTCGGAAGTGG
 TTGGCGGCCATCACACCTCCATTAACGACCTGCTGTTCCGGATCCAGGCCGGGCCGAGCAGTACTCAGC
 CTGGGTAACCTCGCTGCCCGCAGCCCTGGCCTGGTGGACTACACCCTGGAACCCCTGCACGTGCTGCTG
 GACAGCCAGGACCCGCGCGGGAGGCACCTGAGGAGGGCCCTGAGTCAGTACCTGACGGACAGGGCTCGT
 GGAGGGACTGCAGCCGGCCGTGCCACCAGGGCGGCAGAAGAGCCCGAGACCCATGCCAGTGTGTGTG
 CCATGGCTCAGCGGTACCAACCCAGGACTGCTGCCCTCGGCAGAGGGCCCTGGCCAGCTGGAGGTGACC
 TTCATCCAAGCATGGGGCCTGTGGGGGACTGGTTCACCTGCCACGGATGCCTATGTGAAGCTCTTCTTTG
 GTGGCCAGGAGCTGAGGACGAGCACCGTGTGGACAATAACAACCCATCTGGTCAGTGGGCTGGATTT
 TGGGGATGTGCTCCTGGCCACAGGGGGGCCCTGAGGTTGCAGGTCTGGGATCAGGACTCTGGCAGGGAC
 GATGACCTCCTTGGCACCTGTGATCAGGCTCCCAAGTCTGGTTCATGAGGTGAGATGCAACCTGAATC
 ATGGCCACCTAAAATCCGCTATCATGCCAGGTGCTTGGCCACCTGGGAGGAGGCACCTGCCTGGACTA
 TGTCGCCCAAATGCTTCTGGGGGAGCCTCCAGGAAACCGGAGTGGGGCCGTGTGG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_005041

ORF Size: 1665 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](#)

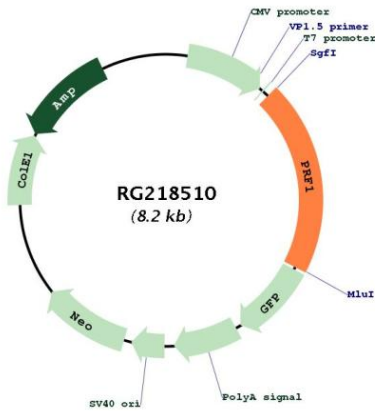
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:**
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_005041.5
RefSeq Size:	2529 bp
RefSeq ORF:	1668 bp
Locus ID:	5551
UniProt ID:	P14222
Cytogenetics:	10q22.1
Domains:	C2, MACPF
Protein Families:	Druggable Genome
Protein Pathways:	Allograft rejection, Autoimmune thyroid disease, Graft-versus-host disease, Natural killer cell mediated cytotoxicity, Type I diabetes mellitus, Viral myocarditis
Gene Summary:	This gene encodes a protein with structural similarities to complement component C9 that is important in immunity. This protein forms membrane pores that allow the release of granzymes and subsequent cytolysis of target cells. Whether pore formation occurs in the plasma membrane of target cells or in an endosomal membrane inside target cells is subject to debate. Mutations in this gene are associated with a variety of human disease including diabetes, multiple sclerosis, lymphomas, autoimmune lymphoproliferative syndrome (ALPS), aplastic anemia, and familial hemophagocytic lymphohistiocytosis type 2 (FHL2), a rare and lethal autosomal recessive disorder of early childhood. [provided by RefSeq, Aug 2017]

Product images:



Circular map for RG218510