

# Recombinant Full Length Human PRF1

**Cat. No.** PRF1-30288TH    **Lot. No.** (See product label)

## SPECIFICATION

|                         |   |
|-------------------------|---|
| <b>Product Overview</b> | Recombinant full length Human Perforin with a proprietary N-terminal tag, molecular weight 84.85 kDa inclusive of tag   |
| <b>Species</b>          | Human   |
| <b>Source</b>           | Wheat Germ  |
| <b>ProteinLength</b>    | 534 amino acids   |
| <b>Description</b>      | The protein encoded by this gene has structural and functional similarities to complement component 9 (C9). Like C9, this protein creates transmembrane tubules and is capable of lysing non-specifically a variety of target cells. This protein is one of the main cytolytic proteins of cytolytic granules, and it is known to be a key effector molecule for T-cell- and natural killer-cell-mediated cytotoxicity. Defects in this gene cause familial hemophagocytic lymphohistiocytosis type 2 (HPLH2), a rare and lethal autosomal recessive disorder of early childhood. Alternative splicing results in multiple transcript variants encoding the same protein. |
| <b>Molecular Weight</b> | 84.850kDa inclusive of tags   |
| <b>Form</b>             | Liquid  |
| <b>Purity</b>           | Proprietary Purification  |
| <b>Storage buffer</b>   | pH: 8.00 Constituents: 0.79% Tris HCl, 0.3% Glutathione   |

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

|                                 |  |
|---------------------------------|--|
| <b>Storage</b>                  | Shipped on dry ice. Upon delivery aliquot and store at -80oC. Avoid freeze / thaw cycles.  |
| <b>Sequences of amino acids</b> | <p>           PCHTAARSECKRSHKFVPGAWLAGEGVDVTSLRSGSFPV DTQRFLRPDGTCTLC<br/>           ENALQEGTLQRLPLALTNWRAQSG CQRHVTRAKVSSTEAVARDAARSIRNDWKV<br/>           GLDVTPKPTS NVHVSVAGSHSQAANFAAQKTHQDQYSFSTDTVECRFYSF HVVHT<br/>           PPLHPDFKRALGDLPHHFNASTQPAYLRLISNYGT HFIRAVELGGRISALTALRTCEL<br/>           ALEGLTDNEVEDCLTVE AQVNIGIHGSISAEAKACEEKKKKHKMTASFHQTYRERHS<br/>           EVVGGHHTSINDLLFGIQAGPEQYSAWVNSLPGSPGLVDY TLEPLHVLLDSQDPRR<br/>           EALRRALSQYLTDRARWRDCSRPC PPGRQKSPRDPQCVCVCHGSAVTTQDCCPRQ<br/>           RGLAQLEVTF IQAWGLWGDWFTATDAYVKLFLGGQELRTSTVWDNNNPIW SVRL<br/>           DFGDVLLATGGPLRLQVWDQDSGRDDDLLGTCDQAP KSGSHEVRCNLNHGHLKF<br/>           RYHARCLPHLGGGTCLDYVPQM LLGEPGPNRSGAVW         </p> |
| <b>Sequence Similarities</b>    | Belongs to the complement C6/C7/C8/C9 family.Contains 1 C2 domain.Contains 1 EGF-like domain.Contains 1 MACPF domain.  |

## GENE INFORMATION

|                        |   |
|------------------------|---|
| <b>Gene Name</b>       | PRF1 perforin 1 (pore forming protein) [ Homo sapiens ]   |
| <b>Official Symbol</b> | PRF1  |
| <b>Synonyms</b>        | PRF1; perforin 1 (pore forming protein); perforin-1; HPLH2; P1; Perforin; perforin 1 (preforming protein); PFP; |
| <b>Gene ID</b>         | 5551  |
| <b>mRNA Refseq</b>     | NM_001083116  |
| <b>Protein Refseq</b>  | NP_001076585  |



|                            |   |
|----------------------------|---|
| <b>MIM</b>                 | 170280  |
| <b>Uniprot ID</b>          | P14222  |
| <b>Chromosome Location</b> | 10q22   |
| <b>Pathway</b>             | Allograft rejection, organism-specific biosystem; Allograft rejection, conserved biosystem; Apoptosis, organism-specific biosystem; Autoimmune thyroid disease, organism-specific biosystem; Autoimmune thyroid disease, conserved biosystem; |
| <b>Function</b>            | calcium ion binding; protein binding; wide pore channel activity;   |

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA