

Perforin 1 (PRF1) Active Protein | PRF1 active protein

Active Perforin 1 (PRF1)

CATALOG # AAA152181	HOST E Coli	APPLICATIONS Activity Assay, Cell Culture
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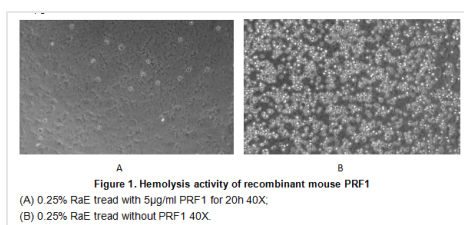
PRODUCT SYNONYMS

Perforin 1 (PRF1); Active Perforin 1 (PRF1); PRF1/Perforin 1; FLH2; HPLH2; P1; PFP; Pore Forming Protein; Cytolysin; Lymphocyte pore-forming protein; PRF1 active protein

PRODUCT SPECIFICATIONS

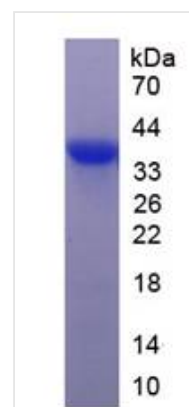
Host	E Coli
Purity/Purification	Greater than 90% by SDS-PAGE
Form/Format	PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300. Freeze-dried powder
Sequence	Val40~Lys3 55
Applicable Applications for PRF1 active protein	Activity Assay, Cell Culture
Species	Mouse
Isoelectric Point	8.3
Tag	N-terminal His Tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Reconstitution	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0mg/mL. Do not vortex.
Preparation and Storage	Store at 2-8 degree C for one month, -80 degree C for 12 months Stable for 12 months if correctly stored.

IMAGES



Bioactivity

Perforin 1 (PRF1) is a pore forming cytolytic protein found in the granules of cytotoxic T lymphocytes (CTLs) and NK cells. Upon degranulation, perforin binds to the target cell's plasma membrane, and oligomerises in a Ca²⁺ dependent manner to form pores on the target cell. The pore formed allows for the passive diffusion of a family of pro-apoptotic proteases, known as the granzymes, into the target cell. The activity of recombinant PRF1 was measured by lysis of erythrocytes using a hemolysis assay. A general procedure is as follows: two-fold dilute the recombinant mouse PRF1 with 0.9% NaCl, add 50ul a serial dilution of PRF1, 10ul 0.1M CaCl₂ to each well, then add 50ul 0.25% rabbit erythrocyte (RaE) to each well and mixed gently. Add 50ul 0.9% NaCl to replace PRF1 in control wells. The plate is incubated for 20 hours at 37 degree C, 5% CO₂. The results are shown in Figure 1. It was obvious that the minimal effective concentration of PRF1 is 5ug/ml.



SDS-PAGE
SDS-PAGE

ADDITIONAL INFORMATION

Product Categories/Family for PRF1 active protein	Immune molecule; Active proteins/AP
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NCBI AND UNIPROT INFORMATION

NCBI GI #	225735600
NCBI GeneID	18646
NCBI Accession #	NP_035203.3
NCBI GenBank Nucleotide #	NM_011073.3
UniProt Accession #	P10820
Molecular Weight	62,081 Da
NCBI Official Full Name	perforin-1
NCBI Official Synonym Full Names	perforin 1 (pore forming protein)
NCBI Official Symbol	Prf1
NCBI Official Synonym Symbols	Pfn; Pfp; Prf-1
NCBI Protein Information	perforin-1
UniProt Protein Name	Perforin-1
UniProt Gene Name	Prf1
UniProt Synonym Gene Names	Pfp; P1

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/e-coli-active-protein/perforin-1-prf1/152181>