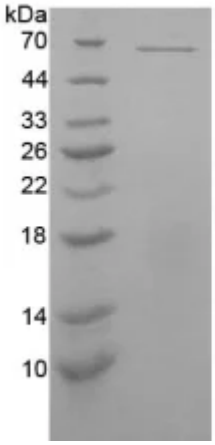
Active Perforin 1 (PRF1)

Catalog#:PEM12647

概述（Summary）

别称（Alternative Names）	FLH2; HPLH2; P1; PFP; Pore Forming Protein; Cytolysin; Lymphocyte pore-forming protein
纯度（Purity）	Greater than 90% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Val40-Lys355】
Accession #	P10820
表达宿主（Host）	E.coli
种属（Species）	Mus musculus (Mouse)
预测分子量（Predicted MW）	65.3 kDa
制剂（Form）	Lyophilized from a 0.2 μm filtered solution of 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
运输方式（Shipping）	The product is shipped with ice bag. Upon receipt, store it immediately at the temperature listed below.
稳定性&储存（Stability &Storage）	12 months at -20°C to -80°C in lyophilized state.6 months at -20°C to -80°C under sterile conditions after reconstitution.7-10 days at 2°C to 8°C under sterile conditions after reconstitution.Please minimize freeze-thaw cycles.
复溶（Reconstitution）	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
背景介绍（References）	Plays a key role in secretory granule-dependent cell death, and in defense against virus-infected or neoplastic cells. Can insert into the membrane of target cells in its calcium-bound form, oligomerize and form large pores. Promotes cytolysis and apoptosis of target cells by facilitating the uptake of cytotoxic granzymes.

电泳图（SDS-PAGE image）



Greater than 90% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）

V WMAGEGMDVT
TLRRSGSFPV NTQRFLRPDR TCTLCKNSLM RDATQRLPVA ITHWRPHSSH
CQRNVAAAKV HSTEGVAREA AANINNDWRV GLDVNPRPEA NMRASVAGSH
SKVANFAAEK TYQDQYNFNS DTVECRMYSF RLVQKPPLHL DFKKALRALP
RNFNSSTEHA YHRLISSYGT HFITAVDLGG RISVLTALRT CQLTLNGLTA
DEVGDCLNVE AQVSIGAQAS VSSEYKACEE KKKQHKMATS FHQTYRERHV
EVLGGPLDST HDLLFGNQAT PEQFSTWTAS LPSNPGLVDY SLEPLHTLLE
EQNPK

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 PREF1 was measured by lysis of erythrocytes using a hemolysis assay. A general procedure is as fllows: two-fold dilute the recombinant mouse PREF1 with 0.9% NaCl, add 50µl a serial dilution of PREF1, 10µl 0.1M CaCl2 to each well, then add 50µl 0.25% rabbit erythrocyte (RaE) to each well and mixed gently. Add 50µl 0.9% NaCl to reaplace PREF1 in control wells. The plate is incubated for 20 hours at 37 ℃, 5% CO2. The results are shown in Figure 1. It was obvious that the minimal effective concentration of PREF1 is 2.5µg/ml.

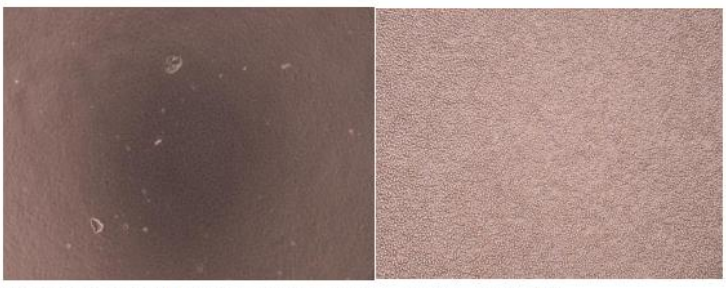


Figure 1. Hemolysis activity of recombinant mouse PREF1.
(A) 0.25% RaE tread with 25µg/ml PREF1 for 20h;
(B) 0.25% RaE tread without PREF1.

注意事项（Note）

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