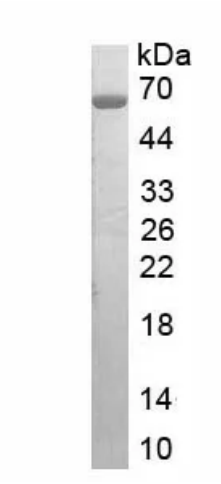
Active Perforin 1 (PRF1)

Catalog#:PEH12646

概述（Summary）

别称（Alternative Names）	FLH2; HPLH2; P1; PFP; Pore Forming Protein; Cytolysin; Lymphocyte pore-forming protein
纯度（Purity）	Greater than 80% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Pro22-Trp555】
Accession #	P14222
表达宿主（Host）	E.coli
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	62.9 kDa
制剂（Form）	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 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 ddH_2O to a concentration of 0.1-0.5 mg/mL. Do not vortex.
背景介绍（References）	Pore-forming protein that plays a key role in secretory granule-dependent cell death, and in defense against virus-infected or neoplastic cells. Plays an important role in killing other cells that are recognized as non-self by the immune system, e.g. in transplant rejection or some forms of autoimmune disease. 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 80% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）

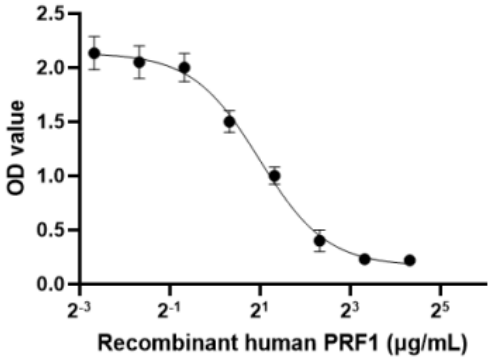


Figure1. The dose-effect curve of recombinant human PRF1 on Hela cells

Perforin 1 (PRF1) is a cytolytic protein found in the granules of Cytotoxic T lymphocytes (CTLs) and NK cells. Upon degranulation, perforin inserts itself into the target cell's plasma membrane, forming a pore. The lytic membrane-inserting part of perforin is the MACPF domain. This region shares homology with cholesterol-dependent cytolysins from Gram-positive bacteria. It has been demonstrated that PRF1 causes the lysis of abnormal body cells and the elimination of virus-infected cells and tumors.To test the effect of PRF1 on cell apoptosis， Hela cells were seeded into triplicate wells of 96-well plates and allowed to attach, replaced with various concentrations of recombinant human PRF1. After incubated for 72h, cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8 (CCK-8). Briefly, 10 μl of CCK-8 solution was added to each well of the plate, then the absorbance at 450 nm was measured using a microplate reader after incubating the plate for 1-4 hours at 37 ℃. Cell viability was assessed by CCK-8 assay after incubation with recombinant human PRF1 for 72h. The result was shown in Figure 1. It was obvious that PRF1 significantly decreased cell viability of Hela cells. The ED50 of recombinant human PRF1 is 1.985 μg/ml.

注意事项（Note）

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