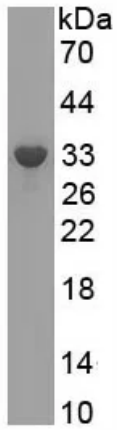
Active Perforin 1 (PRF1)

Catalog#:PER12649

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）	【Ala120-Asp353】
Accession #	P35763
表达宿主（Host）	E.coli
种属（Species）	Rattus norvegicus (Rat)
预测分子量（Predicted MW）	29.5 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 10mM PBS (pH7.4) to a concentration of 0.1-1.0 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 90% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）



A B

Figure 1. Hemolysis activity of recombinant Rat PRF1

(A) 0.25% RaE tread with 7.5μg/ml PRF1 for 20h;

(B) 0.25% RaE tread without PRF1.

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 fllows: two-fold dilute the recombinant rat PRF1 with 0.9% NaCl, add 50μl a serial dilution of PRF1, 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 PRF1 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 PRF1 is 7.5μg/ml.

注意事项（Note）

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