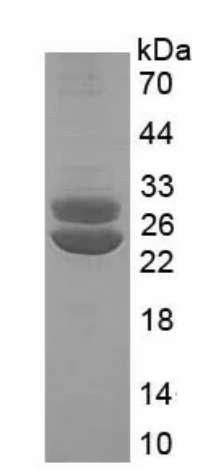
Active Prolactin (PRL)

Catalog#:PHH12532

概述（Summary）

别称（Alternative Names）	LTH; Luteotropic Hormone
纯度（Purity）	Greater than 95% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Leu29-Cys227】
Accession #	Q5THQ0
表达宿主（Host）	293F
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	23.4 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.

电泳图（SDS-PAGE image）



Greater than 95% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）

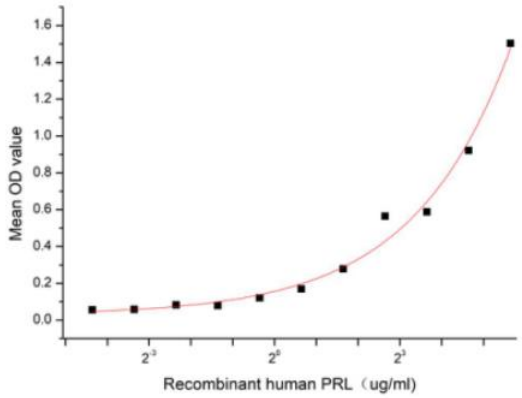
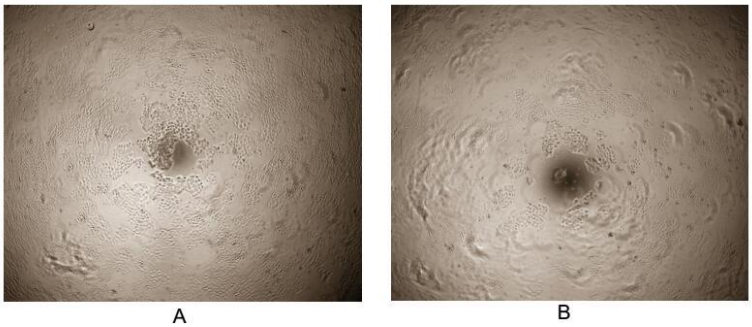


Figure 1. The binding activity of recombinant human PRL and recombinant human PRLR

PRL (prolactin), also known as luteotropin, is a hormone secreted from the pituitary gland and is best known for its role in enabling mammals to produce milk. PRL plays an essential role in metabolism, regulation of the immune system. According to reports, PRL also stimulates proliferation of certain cells, including MCF-7. Thus, proliferation assay of PRL was conducted using MCF-7 cells. Briefly, MCF-7 cells were seeded into triplicate wells of 96-well plates at a density of 2,000cells/well and allowed to attach overnight, then the medium was replaced with serum-free standard DMEM prior to the addition of various concentrations of PRL. After incubated for 72h, cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8 (CCK-8). Briefly， 10μL of CCK-8 solution was added to each well of the plate, then the absorbance at 450nm was measured using a microplate reader after incubating the plate for 1-4 hours at 37oC. (A) MCF-7 cells cultured in DMEM, stimulated with 1ng/mL PRL for 72h; (B) Unstimulated MCF-7 cells cultured in DMEM for 72h. Figure. Cell proliferation of MCF-7 cells after stimulated with PRL. The dose-effect curve of PRL was shown in Figure 2. It was obvious that PRL significantly promoted cell proliferation of MCF-7 cells. The ED50 for this effect is typically 3.709 to 8.973 ng/mL. Figure. The dose-effect curve of PRL on MCF-7 cells. PRL (prolactin), also known as luteotropin, is a hormone secreted from the pituitary gland and is best known for its role in enabling mammals to produce milk. PRL plays an essential role in metabolism, regulation of the immune system through activating its specific membrane-anchored receptor (PRLR). A functional ELISA assay was conducted to detect the interaction of recombinant human PRL and recombinant human PRLR. Briefly, PRL was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 μl were then transferred to PRLR-coated microtiter wells and incubated for 1h at 37℃. Wells were washed with PBST and incubated for 1h with anti-PRL pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37℃, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37℃. Finally, add 50 μL stop solution to the wells and read at 450/630 nm immediately. The binding activity of recombinant human PRL and recombinant human PRLR was shown in Figure 1, and this effect was in a dose dependent manner.



A　　B

注意事项（Note）

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