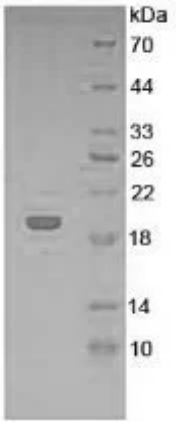
# Active Tumor Necrosis Factor Related Apoptosis Inducing Ligand (TRAIL)

*Catalog#:PEH12249*

## 概述（Summary）

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|---|---|
| **别称（Alternative Names）** | CD253; TNFSF10; APO2L; Apo2-L; TL2; TRAIL; Tumor Necrosis Factor Ligand Superfamily Member 10; Apo-2 Ligand |
| **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）** | 【Val114-Gly281】 |
| **Accession #** | P50591 |
| **表达宿主（Host）** | E.coli |
| **种属（Species）** | Homo sapiens (Human) |
| **预测分子量（Predicted MW）** | 19.6 kDa |
| **制剂（Form）** | 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）** | Cytokine that binds to TNFRSF10A/TRAILR1, TNFRSF10B/TRAILR2, TNFRSF10C/TRAILR3, TNFRSF10D/TRAILR4 and possibly also to TNFRSF11B/OPG. Induces apoptosis. Its activity may be modulated by binding to the decoy receptors TNFRSF10C/TRAILR3, TNFRSF10D/TRAILR4 and TNFRSF11B/OPG that cannot induce apoptosis. |

## 电泳图（SDS-PAGE image）




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

## 活性图（Bioactivity image）

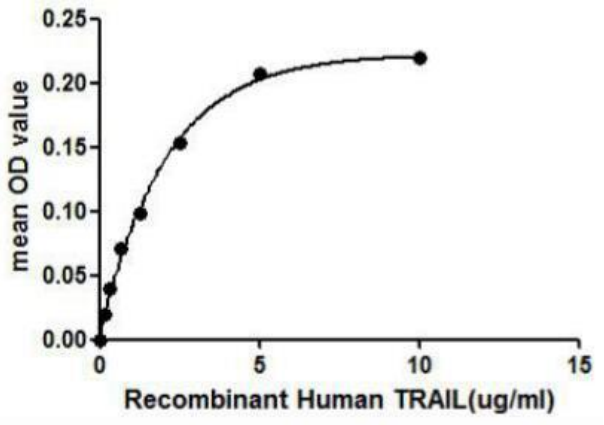



**Figure 1. The binding activity of TRAIL with TNFRSF10B**

Protein TRAIL (TNF-Related Apoptosis-Inducing Ligand) is a cytokine that belongs to the tumor necrosis factor (TNF) ligand family. TRAIL induces apoptosis in transformed and tumor cells. This protein binds to several members of TNF receptor superfamily including TNFRSF10B/TRAILR2. Thus a binding ELISA assay was conducted to detect the interaction of TRAIL and TNFRSF10B. Briefly, recombinant human TRAIL were diluted serially in PBS, with 0.01%BSA (pH 7.4). Duplicate samples of 100uL were then transferred to TNFRSF10B-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-TRAIL pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50µL stop solution to the wells and read at 450nm immediately. The binding activity of TRAIL and TNFRSF10B was shown in Figure 1, and this effect was in a dose dependent manner. Tumor Necrosis Factor Related Apoptosis Inducing Ligand (TRAIL) is a recently identified member of the TNF gene superfamily. TRAIL is widely expressed in a variety of human tissues, most predominantly in lung, spleen and prostat. As its name suggests, TRAIL was primarily of particular interest for its ability to selectively induce apoptosis in tumour cells in vitro and in vivo, while apparently exhibiting minimal off-target effects. In order to test the effect of human recombinant TRAIL protein on cell apoptosis, 2x104 A549 cells were seeded into quintuplicate wells of 96-well plates and allowed to attach, replaced with various concentrations of recombinant human TRAIL. After incubated for 72 hours, the 96-well plates were read at OD450 nm. The result was shown in Figure1. It was obvious that rmTRAIL significantly decreased cell viability of A549 cells. The ED50 of recombinant human TRAIL is 0.84 µg/mL.

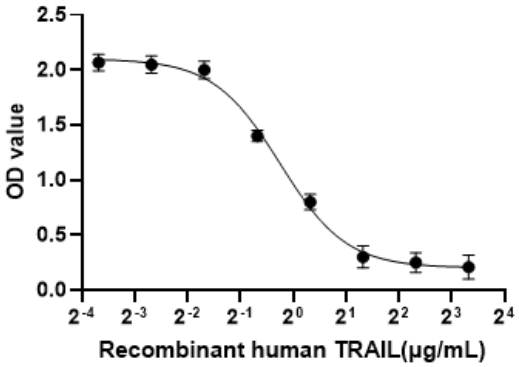



Figure 2. The dose-effect curve of recombinant human TRAIL on A549 cells

## 注意事项（Note）

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