APA139Hu01 100μg
Active Tumor Necrosis Factor Related Apoptosis Inducing Ligand (TRAIL)
Organism Species: Homo sapiens (Human)
Instruction manual

FOR IN VITRO USE AND RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

1st Edition (Apr, 2016)

[PROPERTIES]

Source: Prokaryotic expression.
Host: *E. coli*
Residues: Val114~Gly281
Tags: N-terminal His-tag
Purity: >95%
Buffer Formulation: 20mM Tris, 150mM NaCl, pH8.0, containing 0.05% sarcosyl and 5% trehalose.
Applications: Cell culture; Activity Assays; In vivo assays.
(May be suitable for use in other assays to be determined by the end user.)
Predicted isoelectric point: 8.6
Predicted Molecular Mass: 19.6kDa
Accurate Molecular Mass: 19kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

[STORAGE AND STABILITY]

Storage: Avoid repeated freeze/thaw cycles.
Store at 2-8°C for one month.
Aliquot and store at -80°C for 12 months.

Stability Test: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37ºC for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

[SEQUENCE]

VRERGPQ RVAAHITGTR GRSNTLSSPN SKNEKALGRK
INSWESSRSG HSFLSNLHLR NGELVIHEKG FYYIYSQTYF RFQEEIKENT
KNDKQMVQYI YKYTSYPDPI LLMKSARNSC WSKDAEYGLY SIYQGGIFEL
KENDRIFVSV TNEHLIDMDH EASFFGAFLV G

[ACTIVITY]

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.

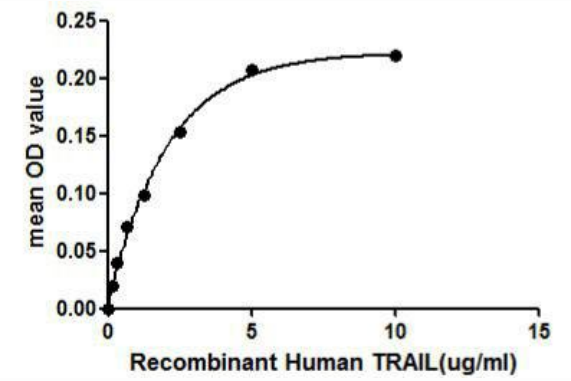

Figure 1. The binding activity of TRAIL with TNFRSF10B.

[IDENTIFICATION]

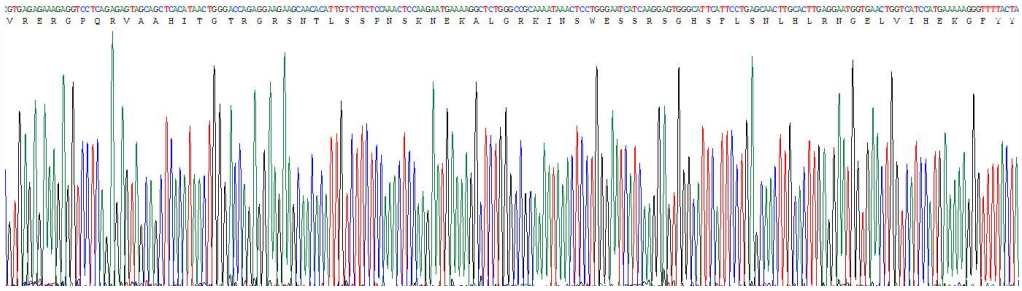

Figure 2. Gene Sequencing (extract)

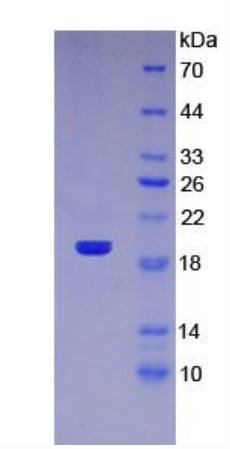

Figure 3. SDS-PAGE

Sample: Active recombinant TRAIL, Human

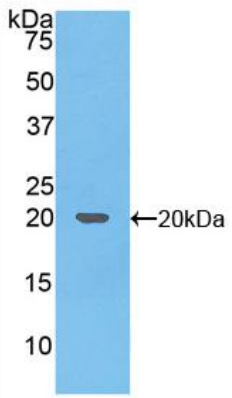

Figure 4. Western Blot

Sample: Recombinant TRAIL, Human;

Antibody: Rabbit Anti-Human TRAIL Ab (PAA139Hu01)