

APA813Hu01 100µg
Active Tumor Necrosis Factor Receptor Superfamily, Member 12A (TNFRSF12A)
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: Ser24~Ala126

Tags: Two N-terminal Tags, His-tag and GST-tag

Purity: >85%

Buffer Formulation: 20mM Tris, 150mM NaCl, pH8.0, containing 0.05% sarcosyl and 5% trehalose.

Applications: Cell culture; Activity Assays.

(May be suitable for use in other assays to be determined by the end user.)

Predicted isoelectric point: 6.7

Predicted Molecular Mass: 40.8kDa

Accurate Molecular Mass: 44kDa as determined by SDS-PAGE reducing conditions.

Phenomenon explanation:

The possible reasons that the actual band size differs from the predicted are as follows:

1. Splice variants: Alternative splicing may create different sized proteins from the same gene.
2. Relative charge: The composition of amino acids may affects the charge of the protein.
3. Post-translational modification: Phosphorylation, glycosylation, methylation etc.
4. Post-translation cleavage: Many proteins are synthesized as pro-proteins, and then cleaved to give the active form.
5. Polymerization of the target protein: Dimerization, multimerization etc.

[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 37°C 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]

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SVAGEQA PGTAPCSRGS SWSADLDKCM  
DCASCRARPH SDFCLGCAA PPAPFRLLWP ILGGALSLTF VLGLLSGFLV  
WRRCRREKF TPIEETGGE GCPAVA
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[ACTIVITY]

TNFRSF12A (Tumor necrosis factor receptor superfamily member 12A) belongs to the Tumor necrosis factor receptor superfamily. TNFRSF12A is thought to induce apoptosis weakly in some cell types and promotes angiogenesis and the proliferation of endothelial cells. A binding ELISA assay was conducted to detect the association of TNFRSF12A with TNF α . Briefly, TNFRSF12A were diluted serially in PBS, with 0.01%BSA (pH 7.4). Duplicate samples of 100uL TNFRSF12A were then transferred to TNF α -coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-TNFRSF12A 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 TNFRSF12A and TNFa was shown in Figure 1, and this effect was in a dose dependent manner.

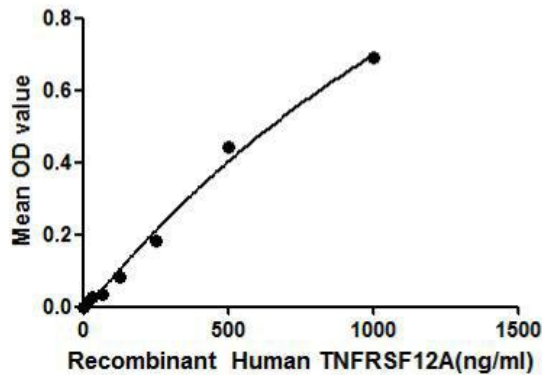


Figure 1. The binding activity of TNFRSF12A with TNFa.

[IDENTIFICATION]

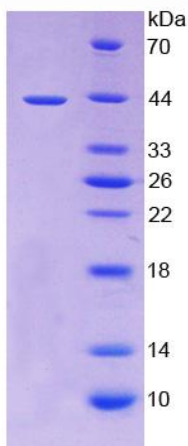


Figure 2. SDS-PAGE

Sample: Active recombinant TNFRSF12A, Human

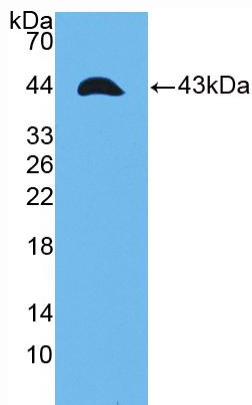


Figure 3. Western Blot

Sample: Recombinant TNFRSF12A, Human;

Antibody: Rabbit Anti-Human TNFRSF12A Ab (PAA813Hu01)