

APB499Hu02 500µg
Active Active Tumor Necrosis Factor Receptor Superfamily,
Member 1A (TNFRSF1A)
Organism Species: *Homo sapiens* (Human)
Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

1st Edition (Apr, 2016)

[PROPERTIES]

Source: Prokaryotic expression.

Host: *E. coli*

Residues: Cys248~Met428

Tags: N-terminal His-tag

Purity: >92%

Buffer Formulation: 100mM NaHCO₃, 500mM NaCl, pH8.3, containing 0.01% sarcosyl, 5%Trehalose and Proclin300.

Applications: Cell culture; Activity Assays.

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

Predicted isoelectric point: 7.1

Predicted Molecular Mass: 23.7kDa

Accurate Molecular Mass: 24kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

Reconstitute in 100mM NaHCO₃, 500mM NaCl (pH8.3) 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]

CGK

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STPEKEGELE GTTTKPLAPN PSFSPTPGFT PTLGFSPVPS STFTSSSTYT  
PGDCPNFAAP RREVAPPYQG ADPILATALA SDPIPNPLQK WEDSAHKPQS  
LDTDDPATLY AVVENVPPLR WKEFVRRLLGL SDHEIDRLEL QNGRCLREAQ  
YSMLATWRRR TPRREATLEL LGRVLRDM
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[ACTIVITY]

Tumor necrosis factor receptor superfamily member 1A (TNFRSF1A), also known as Tumor necrosis factor receptor 1 (TNFR1) and CD120a, is a ubiquitous membrane receptor that binds tumor necrosis factor-alpha (TNF α). This receptor can activate the transcription factor NF- κ B, mediate apoptosis, and function as a regulator of inflammation. Antiapoptotic protein BCL2-associated athanogene 4 (BAG4/SODD) and adaptor proteins TRADD and TRAF2 have been shown to interact with this receptor, and thus play regulatory roles in the signal transduction mediated by the receptor. Besides, Granulin (GRN) has been identified as an interactor of TNFRSF1A, thus a binding ELISA assay was conducted to detect the interaction of recombinant human TNFRSF1A and recombinant human GRN. Briefly, TNFRSF1A were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to GRN-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-TNFRSF1A 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 of TNFRSF1A and GRN was shown in Figure 1, and this effect was in a dose dependent manner.

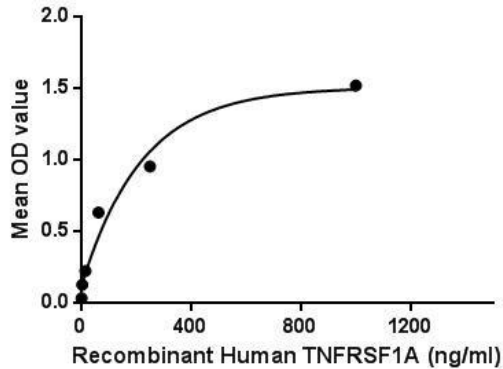


Figure 1. The binding activity of TNFRSF1A with GRN.

[IDENTIFICATION]

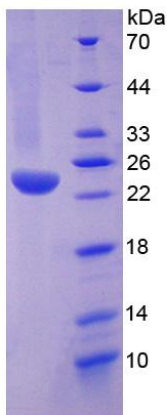


Figure 2. SDS-PAGE

Sample: Active recombinant TNFRSF1A, Human

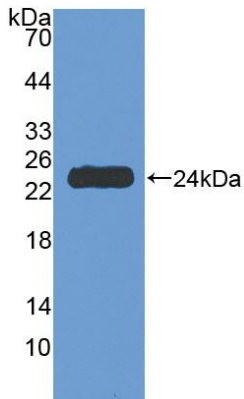


Figure 3. Western Blot

Sample: Recombinant TNFRSF1A, Human;

Antibody: Rabbit Anti-Human TNFRSF1A Ab (PAB499Hu02)

[IMPORTANT NOTE]

The kit is designed for in vitro and research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.