APB043Hu61 100μg
Active Tumor Necrosis Factor Receptor Superfamily, Member 7 (TNFRSF7)
Organism Species: *Homo sapiens* (Human)
Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

13th Edition (Revised in Aug, 2023)

[PROPERTIES]

Source: Eukaryotic expression.
Host: 293F cell
Residues: Thr21~Asp121
Tags: N-terminal His Tag and C-terminal Fc Region of Human IgG1
Purity: >90%
Endotoxin Level: <1.0EU per 1μg (determined by the LAL method).
Buffer Formulation: PBS, pH7.4, containing 5% Trehalose .
Original Concentration: 200μg/mL
Applications: Activity Assays.
(May be suitable for use in other assays to be determined by the end user.)
Predicted isoelectric point: 7.3
Predicted Molecular Mass: 42.3kDa
Accurate Molecular Mass: 50kDa 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 10mM PBS (pH7.4) 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]

TPAPKSCPERHYWAQGKLCCQMCEPGTFLVKDCDQHRKAAQCDPCIPGVSFSPDHHTRPHCE
SCRHCNSGLLVRNCTITANAECACRNGWQCRDKECTECD

[ACTIVITY]

TNFRSF7(Tumor necrosis factor receptor superfamily member 7), also known as CD27 antigen, is a member of the TNF-receptor superfamily. This receptor is thought to be involved in tumor necrosis factor-activated receptor activity by binding with TNFs. Thus, a binding ELISA assay was conducted to detect the association of TNFRSF7 with TNFb. Briefly, recombinant human TNFRSF7 were diluted serially in PBS with 0.01% BSA(pH 7.4). Duplicate samples of 100ul were then transferred to TNFb-coated microtiter wells and incubated for 2h at 37° C. Wells were washed with PBST and incubated for 1 h with anti-TNFRSF7 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 TNFRSF7 with TNFb was shown in Figure 1 and , the EC50 for this effect is 0.20ug/mL.

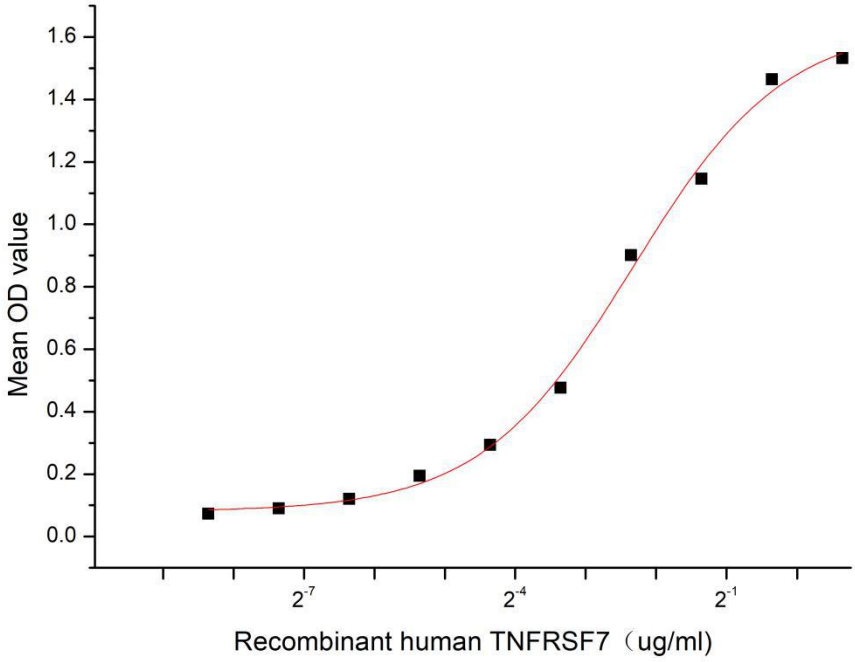

Figure 1. The binding activity of recombinant human TNFRSF7 with recombinant human TNFb

[IDENTIFICATION]

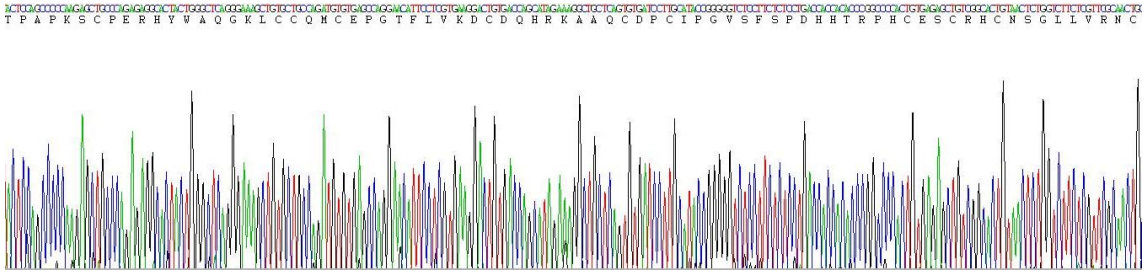

Figure 2. Gene Sequencing (extract)

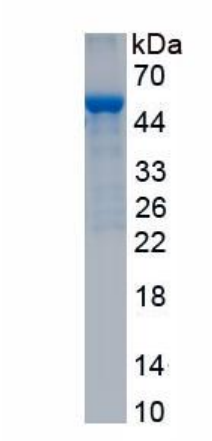

Figure 3. SDS-PAGE

Sample: Active recombinant TNFRSF7, Human

[IMPORTANT NOTE]

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