Active B-Cell Activating Factor (BAFF)

Catalog No.: TP09436 50μg

Sequence Information

Species：Human **Gene ID:**10673

Swiss Prot:Q9Y275 **Synonyms:**CD257; TNFSF13B; BLYS; TALL1; THANK; TNFSF20; ZTNF4; B lymphocyte stimulator; Tumor Necrosis Factor Ligand Superfamily Member 13B; Dendritic cell-derived TNF-like

Residues: Lys113~Lys283

KIFEPPAPGEGNSSQNSRNKRAVQGPEETVTQDCLQLIADSETPTIQKGSYTFV
PWLLSFKRGSALEEKENKILVKETGYFFIYGQVLYTDKTYAMGHLIQRKKVHVF
GDELSLVTLFRCIQNMPETLPNNSCYSAGIAKLEEGDELQLAIPRENAQISLDG
DVTFFGALK

Product Information

Source: Prokaryotic expression.

Host: *E.coli*

Tags: N-terminal His-Tag

Subcellular Location: Secreted

Purity: >90%

Traits: Freeze-dried powder

Buffer formulation: 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0mg/mL.

Original Concentration: 200μg/mL

Applications: Positive Control; Immunogen; SDS-PAGE; WB.
(May be suitable for use in other assays to be determined by the end user.)

Predicted isoelectric point: 5.9

Predicted Molecular Mass: 20.4kDa

Accurate Molecular Mass: 22kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

Reconstitute in ddH_2O to a concentration of 0.1-0.5 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.

[ACTIVITY]

Tumor necrosis factor ligand superfamily member 13B protein (TNFSF13B) alsoknown as B-cell activating factor (BAFF) is a cytokine that belongs tothetumornecrosis factor (TNF) ligand family. This cytokine is a ligand for receptorsTNFRSF13B/TACI, TNFRSF17/BCMA, and TNFRSF13C/BAFF-R. This cytokineis expressed in B cell lineage cells, and acts as a potent B cell activator. It hasbeen also shown to play an important role in the proliferation and differentiationofB cells. Besides, Integrin Beta 1 (ITGb1) has been identified as an interactor ofTNFSF13B, thus a binding ELISA assay was conducted to detect the interactionofrecombinant human TNFSF13B and recombinant human ITGb1. Briefly, TNFSF13B were diluted serially in PBS, with 0.01% BSA (pH7.4). Duplicatesamples of 100ul were then transferred to ITGb1-coated microtiter wellsandincubated for 2h at 37℃. Wells were washed with PBST and incubated for 1hwithanti-TNFSF13B pAb, then aspirated and washed 3 times. After incubationwithHRP labelled secondary antibody, wells were aspirated and washed 3 times. Withthe addition of substrate solution, wells were incubated 15-25 minutes at 37℃. Finally, add 50μL stop solution to the wells and read at 450nmimmediately. Thebinding activity of TNFSF13B and ITGb1 was shown in Figure 1, the EC50was0.74~0.93 ug/ml.

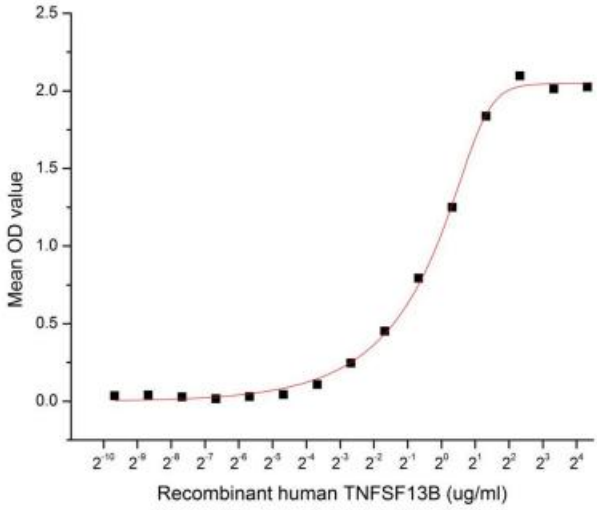

Figure 1. The binding activity of TNFSF13B with ITGb1

[IDENTIFICATION]

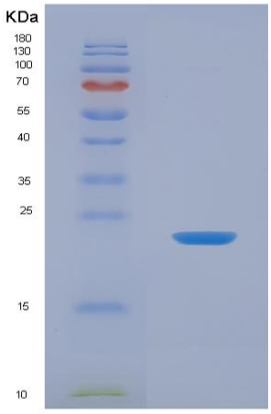

Figure 1. SDS-PAGE

[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.