# BAFF-R (H-1): sc-365410



The Power to Question

### **BACKGROUND**

TNF cytokine family member TALL-1 (also designated BAFF, zTNF4, THANK and BLYS) is a type II membrane protein that shares characteristics with other members of the tumor necrosis factor (TNF) cytokine family. TALL-1 has the ability to bind to three receptors, TACI, BCMA and BAFF-R, but unlike other TNF receptors BAFF-R specifically binds only the TALL-1 ligand. The gene encoding human BAFF-R, which maps to chromosome 22q13.2, is expressed at high levels in spleen and lymph nodes and at lower levels in peripheral blood leukocytes and thymus. Expression of BAFF-R is crucial for selecting transitional B cells into the mature B cell pool.

## **CHROMOSOMAL LOCATION**

Genetic locus: TNFRSF13C (human) mapping to 22q13.2; Tnfrsf13c (mouse) mapping to 15 E1.

### **SOURCE**

BAFF-R (H-1) is a mouse monoclonal antibody raised against amino acids 22-184 of BAFF-R of human origin.

#### **PRODUCT**

Each vial contains 200  $\mu g \ lgG_{2b}$  kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

BAFF-R (H-1) is available conjugated to agarose (sc-365410 AC), 500  $\mu$ g/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-365410 HRP), 200  $\mu$ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-365410 PE), fluorescein (sc-365410 FITC), Alexa Fluor\* 488 (sc-365410 AF488), Alexa Fluor\* 546 (sc-365410 AF546), Alexa Fluor\* 594 (sc-365410 AF594) or Alexa Fluor\* 647 (sc-365410 AF647), 200  $\mu$ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor\* 680 (sc-365410 AF680) or Alexa Fluor\* 790 (sc-365410 AF790), 200  $\mu$ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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# **APPLICATIONS**

BAFF-R (H-1) is recommended for detection of BAFF-R of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for BAFF-R siRNA (h): sc-40231, BAFF-R siRNA (m): sc-40232, BAFF-R shRNA Plasmid (h): sc-40231-SH, BAFF-R shRNA Plasmid (m): sc-40232-SH, BAFF-R shRNA (h) Lentiviral Particles: sc-40231-V and BAFF-R shRNA (m) Lentiviral Particles: sc-40232-V.

Molecular Weight of BAFF-R monomer: 19 kDa.

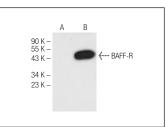
Molecular Weight of BAFF-R dimer: 40 kDa.

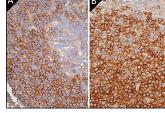
Positive Controls: BAFF-R (h): 293 Lysate: sc-128078 or human spleen extract: sc-363779.

### **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG $\kappa$  BP-HRP: sc-516102 or m-lgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>TM</sup> Molecular Weight Standards: sc-2035, UltraCruz\* Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-lgG $\kappa$  BP-FITC: sc-516140 or m-lgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz\* Mounting Medium: sc-24941 or UltraCruz\* Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-lgG $\kappa$  BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

#### **DATA**





BAFF-R (H-1): sc-365410. Western blot analysis of BAFF-R expression in non-transfected: sc-110760 (**A**) and human BAFF-R transfected: sc-128078 (**B**) 293 whole cell lysates.

BAFF-R (H-1): sc-365410. Immunoperoxidase staining of formalin fixed, paraffin-embedded human tonsil tissue showing membrane staining of subset of cells in germinal center and cells in non-germinal center (A). Immunoperoxidase staining of formalin fixed, paraffinembedded human spleen tissue showing membrane staining of cells in white pulo (B).

# **SELECT PRODUCT CITATIONS**

- Warakomska, M., et al. 2021. The effects of BAFF and APRIL signaling on non-small cell lung cancer cell proliferation and invasiveness. Oncol. Lett. 22: 728.
- 2. Sevdali, E., et al. 2022. BAFF-R activates PI3K/AKT signaling in human naive but not in switched memory B cells through direct interactions with B cell antigen receptors. Cell Rep. 39: 111019.

#### **STORAGE**

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

## **PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com