# SANTA CRUZ BIOTECHNOLOGY, INC.

# BAFF-R (C-20): sc-19886



# 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.

# REFERENCES

- Schneider, P., MacKay, F., Steiner, V., Hofmann, K., Bodmer, J.L., Holler, N., Ambrose, C., Lawton, P., Bixler, S., Acha-Orbea, H., Valmori, D., Romero, P., Werner-Favre, C., Zubler, R.H., Browning, J.L. and Tschopp, J. 1999. BAFF, a novel ligand of the tumor necrosis factor family, stimulates B cell growth. J. Exp. Med. 189: 1747-1756.
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- Mukhopadhyay, A., Ni, J., Zhai, Y., Yu, G.L. and Aggarwal, B.B. 1999. Identification and characterization of a novel cytokine, THANK, a TNF homologue that activates apoptosis, nuclear factor-B, and c-Jun NH<sub>2</sub>-terminal kinase. J. Biol. Chem. 274: 15978-15981.
- Waldschmidt, T.J. and Noelle, R.J. 2001. Immunology. Long live the mature B cell—a baffling mystery resolved. Science 293: 2012-2013.
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# CHROMOSOMAL LOCATION

Genetic locus: TNFRSF13C (human) mapping to 22q13.2.

# SOURCE

BAFF-R (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of BAFF-R of human origin.

# PRODUCT

Each vial contains 200  $\mu g$  IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-19886 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

BAFF-R (C-20) is recommended for detection of BAFF-R of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (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 shRNA Plasmid (h): sc-40231-SH and BAFF-R shRNA (h) Lentiviral Particles: sc-40231-V.

Molecular Weight of BAFF-R monomer: 19 kDa.

Molecular Weight of BAFF-R dimer: 40 kDa

Positive Controls: human spleen extract: sc-363779.

## **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluo-rescence: use donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

# SELECT PRODUCT CITATIONS

 Nakamura, N., Hase, H., Sakurai, D., Yoshida, S., Abe, M., Tsukada, N., Takizawa, J., Aoki, S., Kojima, M., Nakamura, S. and Kobata, T. 2005. Expression of BAFF-R (BR 3) in normal and neoplastic lymphoid tissues characterized with a newly developed monoclonal antibody. Virchows Arch. 447: 53-60.

# **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 or our catalog for detailed protocols and support products.

# MONOS Satisfation Guaranteed

Try **BAFF-R (H-1): sc-365410** or **BAFF-R (F-3): sc-365610**, our highly recommended monoclonal alternatives to BAFF-R (C-20).