

# BAFF-R (FL-175): sc-28989

## 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 22q13.1-q13.31, 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

1. Schneider, P., et al. 1999. BAFF, a novel ligand of the tumor necrosis factor family, stimulates B cell growth. *J. Exp. Med.* 189: 1747-1756.
2. Moore, P.A., et al. 1999. BLYS: member of the tumor necrosis factor family and B lymphocyte stimulator. *Science* 285: 260-263.
3. Mukhopadhyay, A., et al. 1999. Identification and characterization of a novel cytokine, THANK, a TNF homologue that activates apoptosis, nuclear factor- $\kappa$ B, and c-Jun NH<sub>2</sub>-terminal kinase. *J. Biol. Chem.* 274: 15978-15981.
4. Waldschmidt, T.J. and Noelle, R.J. 2001. Immunology. Long live the mature B cell—a baffling mystery resolved. *Science* 293: 2012-2013.
5. Thompson, J.S., et al. 2001. BAFF-R, a newly identified TNF receptor that specifically interacts with BAFF. *Science* 293: 2108-2111.

## CHROMOSOMAL LOCATION

Genetic locus: Tnfrsf13c (mouse) mapping to 15 E1.

## SOURCE

BAFF-R (FL-175) is a rabbit polyclonal antibody raised against amino acids 1-175 (deletion 118-128) representing full length BAFF-R of mouse origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

BAFF-R (FL-175) is recommended for detection of BAFF-R of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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 (m): sc-40232, BAFF-R shRNA Plasmid (m): sc-40232-SH 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.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## SELECT PRODUCT CITATIONS

1. Li, P.P., et al. 2012. BAFF/BAFF-R involved in antibodies production of rats with collagen-induced arthritis via PI3K-Akt-mTOR signaling and the regulation of paeoniflorin. *J. Ethnopharmacol.* 141: 290-300.
2. Wu, H., et al. 2014. Equine adipose-derived stem cell (ASC) expresses BAFF and its receptors, which may be associated with the differentiation process of ASC towards adipocyte. *Int. Immunopharmacol.* 18: 365-372.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.

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Try **BAFF-R (H-1): sc-365410** or **BAFF-R (F-3): sc-365610**, our highly recommended monoclonal alternatives to BAFF-R (FL-175).