

BAFF-R (11C1): sc-32774

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.

SOURCE

BAFF-R (11C1) is a mouse monoclonal antibody raised against mouse B cell lymphoma L1.2 transfectants expressing BAFF-R of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available azide-free for neutralizing, sc-32774 L, 200 µg/0.1 ml.

BAFF-R (11C1) is available conjugated to either phycoerythrin (sc-32774 PE) or fluorescein (sc-32774 FITC), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM.

APPLICATIONS

BAFF-R (11C1) is recommended for detection of BAFF-R of human origin by 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 flow cytometry (1 µg per 1 x 10⁶ cells).

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 SUPPORT REAGENTS

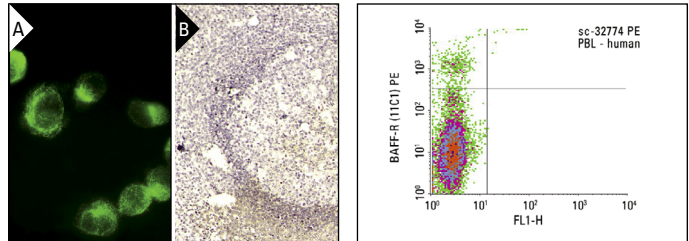
To ensure optimal results, the following support reagents are recommended: 1) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850. 2) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

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.

DATA

BAFF-R (11C1): sc-32774. Immunofluorescence staining of methanol-fixed TE671 cells showing cytoskeletal localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human spleen tissue showing membrane staining of B cell follicles (B).

BAFF-R (11C1): sc-32774. Indirect FCM analysis of human peripheral blood leukocytes stained with BAFF-R (11C1), followed by PE-conjugated goat anti-mouse IgG₁: sc-3764. Quadrant markers were set based on the isotype control, normal mouse IgG₁: sc-3877.

SELECT PRODUCT CITATIONS

- Bojarska-Junak, A., et al. 2009. BAFF and APRIL expression in B-cell chronic lymphocytic leukemia: correlation with biological and clinical features. *Leuk. Res.* 33: 1319-1327.
- Wada, K., et al. 2009. Expression of BAFF-R and TACI in reactive lymphoid tissues and B-cell lymphomas. *Histopathology* 54: 221-232.
- Lee, S.M., et al. 2011. BAFF and APRIL induce inflammatory activation of THP-1 cells through interaction with their conventional receptors and activation of MAPK and NFκB. *Inflamm. Res.* 60: 807-815.
- Suso, J.P., et al. 2018. Profile of BAFF and its receptors' expression in lupus nephritis is associated with pathological classes. *Lupus* 27: 708-715.
- Dimitrakopoulos, F.D., et al. 2019. Expression of immune system-related membrane receptors CD40, RANK, BAFF-R and LTβR is associated with clinical outcome of operated non-small-cell lung cancer patients. *J. Clin. Med.* 8: 741.
- Gao, L., et al. 2021. The BAFF/NFκB axis is crucial to interactions between sorafenib-resistant HCC cells and cancer-associated fibroblasts. *Cancer Sci.* 112: 3545-3554.
- Dimitrakopoulos, F.D., et al. 2021. Genetic variations of CD40 and LTβR genes are associated with increased susceptibility and clinical outcome of non-small-cell carcinoma patients. *Front. Oncol.* 11: 721577.
- Forero-Delgadillo, J., et al. 2022. B-cell activating factor (BAFF) and its receptors' expression in pediatric nephrotic syndrome is associated with worse prognosis. *PLoS ONE* 17: e0277800.

PROTOCOLS

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