### Anti-Mouse CD267 (TACI) Antibody, Clone 8F10, PE

## **Antibodies**

Rat monoclonal IgG2a antibody against mouse CD267 (TACI), PE-

conjugated

Catalog #60116PE #60116PE.1

200 μg 0.2 mg/mL 50 μg 0.2 mg/mL



Scientists Helping Scientists<sup>™</sup> | WWW.STEMCELL.COM

TOLL FREE PHONE 1 800 667 0322 • PHONE +1 604 877 0713 INFO@STEMCELL.COM • TECHSUPPORT@STEMCELL.COM FOR GLOBAL CONTACT DETAILS VISIT OUR WEBSITE

FOR RESEARCH USE ONLY. NOT INTENDED FOR HUMAN OR ANIMAL DIAGNOSTIC OR THERAPEUTIC USES.

# **Product Description**

The 8F10 antibody reacts with mouse CD267 (transmembrane activator and CAML interactor, or TACI), an ~30 kDa type III transmembrane protein of the TNF receptor superfamily that is expressed primarily on the surface of maturing subsets of splenic B cells, including transition type 2 (T2) and marginal zone (MZ) B cells, as well as on plasma cells and plasmablasts. Expression of CD267 is upregulated on B cells exposed to LPS both in vitro and in vivo. CD267 plays important roles in humoral immunity by regulating B cell survival, proliferation, and maturation through its interaction with the ligands APRIL and BAFF. Ligand binding stimulates activation of several transcription factors, including NF-kappa-B, and has been shown to induce either proliferation or apoptosis, suggesting a dual role in the regulation of B cells. CD267 also appears to have an essential function in immunoglobulin isotype switching and B cell differentiation in response to thymus-independent antigens.

Target Antigen Name: CD267 (TACI)

Alternative Names: TACI, TNFRSF 13B, Transmembrane activator and CAML interactor, Tumor necrosis factor receptor 13B

Gene ID: 57916

Species Reactivity: Mouse

Host Species: Rat (Wistar)

Clonality: Monoclonal

Clone: 8F10

Isotype: IgG2a, kappa

Immunogen: Extracellular domain of mouse CD267 (TACI) recombinant protein

Conjugate: PE

# **Applications**

Verified: FC Reported: FC

Special Applications: This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including

EasySep™ Mouse Pan-B Cell Isolation Kit (Catalog #19844), EasySep™ Mouse B Cell Isolation Kit (Catalog

#19854), and EasySep™ Mouse CD138 Positive Selection Kit (Catalog #19857).

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

# Properties

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide

Purification: The antibody was purified by affinity chromatography and conjugated with PE under optimal conditions. The

solution is free of unconjugated PE and unconjugated antibody.

Stability and Storage: Product stable at 2 - 8°C when stored undiluted. Do not freeze. Protect product from prolonged exposure to

light. For product expiry date, please contact techsupport@stemcell.com.

Directions for Use: For flow cytometry the suggested use of this antibody is ≤ 1 µg per 1 x 10^6 cells in 100 µL volume. It is

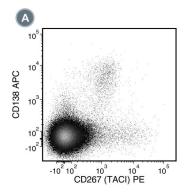
recommended that the antibody be titrated for optimal performance for each application.

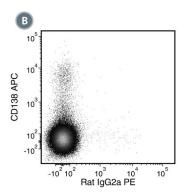
#### Anti-Mouse CD267 (TACI) Antibody, Clone 8F10, PE

# **Antibodies**



### Data





- (A) Flow cytometry analysis of immunized C57BL/6 mouse splenocytes labeled with Anti-Mouse CD267 (TACI) Antibody, Clone 8F10, PE and Anti-Mouse CD138 (Syndecan-1) Antibody, Clone 281-2, APC (Catalog #60035AZ).
- (B) Flow cytometry analysis of immunized C57BL/6 mouse splenocytes labeled with a rat IgG2a, kappa isotype control antibody, PE and Anti-Mouse CD138 (Syndecan-1) Antibody, Clone 281-2, APC.

### Related Products

For a complete list of antibodies, including other conjugates, sizes and clones, as well as related products available from STEMCELL Technologies, please visit our website at www.stemcell.com/antibodies or contact us at techsupport@stemcell.com.

## References

- 1. Tsuji S et al. (2014) TACI deficiency enhances antibody avidity and clearance of an intestinal pathogen. J Clin Invest 124(11): 4857-66.
- 2. Stadanlick JE et al. (2008) Tonic B cell antigen receptor signals supply an NF-kappaB substrate for prosurvival BLyS signaling. Nat Immunol 9(12): 1379-87. (FC)
- 3. Mantchev GT et al. (2007) TACI is required for efficient plasma cell differentiation in response to T-independent type 2 antigens. J Immunol 179(4): 2282-88.
- 4. Salzer U et al. (2007) To switch or not to switch--the opposing roles of TACI in terminal B cell differentiation. Eur J Immunol 37(1): 17-20.
- 5. Ng LG et al. (2004) B cell-activating factor belonging to the TNF family (BAFF)-R is the principal BAFF receptor facilitating BAFF costimulation of circulating T and B cells. J Immunol 173(2): 807-17 (FC)
- 6. Seshasayee D et al. (2003) Loss of TACI causes fatal lymphoproliferation and autoimmunity, establishing TACI as an inhibitory BLyS receptor. Immunity 18(2): 279-88. (FA, FC, WB)
- 7. Schneider P et al. (2001) Maturation of marginal zone and follicular B cells requires B cell activating factor of the tumor necrosis factor family and is independent of B cell maturation antigen. J Exp Med 194(11): 1691-97.
- 8. Von Bülow GU et al. (2001) Regulation of the T-independent humoral response by TACI. Immunity 14(5): 573-82.
- 9. Mackay F & Schneider P. (2008) TACI, an enigmatic BAFF/APRIL receptor, with new unappreciated biochemical and biological properties. Cytokine Growth Factor Rev 19(3-4): 263-76.

STEMCELL TECHNOLOGIES INC.'S QUALITY MANAGEMENT SYSTEM IS CERTIFIED TO ISO 13485 MEDICAL DEVICE STANDARDS

Copyright © 2015 by STEMCELL Technologies Inc. All rights reserved including graphics and images. STEMCELL Technologies & Design, STEMCELL Shield Design, Scientists Helping Scientists, and EasySep are trademarks of STEMCELL Technologies Inc. All other trademarks are the property of their respective holders. Alexa Fluor® is a registered trademark of Life Technologies Corporation. This product is licensed for internal research use only and its sale is expressly conditioned on the buyer not using it for manufacturing, performing a service, or medical test, or otherwise generating revenue. For use other than research, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad, CA 92008 USA or outlicensing@lifetech.com. While STEMCELL and its suppliers is correct, it makes no warranties or representations as to the accuracy or completeness of such information.