

Antibodies

Rat IgG2b, kappa Isotype Control Antibody, Clone RTK4530, Biotin

Rat monoclonal IgG2b, kappa isotype
control antibody, biotin-conjugated



Scientists Helping Scientists™ | 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

Catalog #60077BT
#60077BT.1

200 µg 0.5 mg/mL
50 µg 0.5 mg/mL

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

Product Description

The RTK4530 antibody (IgG2b, kappa) is suitable for use as an isotype-matched control antibody in several applications to estimate the degree of non-specific binding by an antigen-specific antibody. Ideally, the isotype control should have the same subclass of heavy chain (IgA, IgD, IgE, IgG, or IgM) and light chain (kappa or lambda) as the specific antibody being employed. If a conjugated antibody is employed, an isotype control conjugated to the same molecule (e.g. fluorochrome) should be chosen. The use of an appropriate isotype control helps confirm the specificity of the antigen-specific antibody and indicates non-specific binding that may result from binding to Fc receptors or other cell components. The RTK4530 antibody recognises keyhole limpet hemocyanin and has unknown binding specificity, having been screened on a variety of activated, resting, live, and fixed tissues from several species, including mouse, rat, human, and non-human primates.

Target Antigen Name:	IgG2b Isotype Control
Alternative Names:	Not applicable
Gene ID:	Not applicable
Species Reactivity:	Not applicable
Host Species:	Rat
Clonality:	Monoclonal
Clone:	RTK4530
Isotype:	IgG2b, kappa
Immunogen:	Trinitrophenol + KLH
Conjugate:	Biotin

Applications

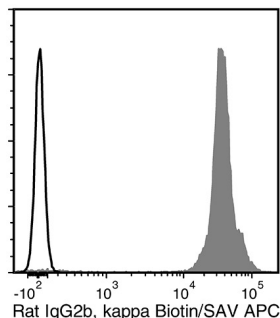
Verified:	FC
Reported:	FC
Special Applications:	This antibody clone has been verified for use as an isotype control antibody for assessing non-specific binding to cells in flow cytometry applications.

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 biotin under optimal conditions. The solution is free of unconjugated biotin.
Stability and Storage:	Product stable at 2 - 8°C when stored undiluted. Do not freeze. For product expiry date, please contact techsupport@stemcell.com .
Directions for Use:	The suggested use of this antibody is at concentrations comparable to those of the specific antibody of interest.

Data



Flow cytometry analysis of C57BL/6 mouse splenocytes labeled with Rat IgG2b, kappa Isotype Control Antibody, Clone RTK4530, Biotin followed by streptavidin (SAV) APC (solid line histogram). Filled histogram shows labeling with a rat IgG2b, kappa positive control antibody (Anti-Mouse CD45 Antibody, Clone 30-F11, Biotin; Catalog #60030BT) followed by SAV 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. Lei G-S et al. (2015) Myeloid-derived suppressor cells impair alveolar macrophages through PD-1 receptor ligation during *Pneumocystis pneumonia*. *Infect Immun* 83(2): 572–82. (FA)
2. Reynolds AE et al. (2015) Natural IgM is produced by CD5- plasma cells that occupy a distinct survival niche in bone marrow. *J Immunol* 194(1): 231–42. (FC)
3. Richards J et al. (2015) Interleukin-19 increases angiogenesis in ischemic hind limbs by direct effects on both endothelial cells and macrophage polarization. *J Mol Cell Cardiol* 79: 21–31. (IHC)
4. Koyama M et al. (2013) Promoting regulation via the inhibition of DNAM-1 after transplantation. *Blood* 121(17): 3511–20. (FACS)
5. Tanaka Y et al. (2012) Stimulation of Ly-6G on neutrophils in LPS-primed mice induces platelet-activating factor (PAF)-mediated anaphylaxis-like shock. *J Leukoc Biol* 91(3): 485–94. (FA)
6. Hart R & Greaves DR. (2010) Chemerin contributes to inflammation by promoting macrophage adhesion to VCAM-1 and fibronectin through clustering of VLA-4 and VLA-5. *J Immunol* 185(6): 3728–39. (FA)
7. Schaefer JS et al. (2010) ICOS promotes IL-17 synthesis in colonic intraepithelial lymphocytes in IL-10^{-/-} mice. *J Leukoc Biol* 87(2): 301–8. (FA)
8. Kuns RD et al. (2009) Invariant natural killer T cell-natural killer cell interactions dictate transplantation outcome after alpha-galactosylceramide administration. *Blood* 113(23): 5999–6010. (FACS)
9. Yi H et al. (2009) Pattern recognition scavenger receptor SRA/CD204 down-regulates Toll-like receptor 4 signaling-dependent CD8 T-cell activation. *Blood* 113(23): 5819–28. (FC)
10. Duan J et al. (2008) Microbial carbohydrate depolymerization by antigen-presenting cells: deamination prior to presentation by the MHC II pathway. *Proc Natl Acad Sci U S A* 105(13): 5183–8. (FA)
11. Sasaki K et al. (2008) Stat6 signaling suppresses VLA-4 expression by CD8⁺ T cells and limits their ability to infiltrate tumor lesions in vivo. *J Immunol* 181(1): 104–8. (FA)
12. Sasaki K et al. (2007) Preferential expression of very late antigen-4 on type 1 CTL cells plays a critical role in trafficking into central nervous system tumors. *Cancer Res* 67(13): 6451–8. (FA)

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 has made all reasonable efforts to ensure that the information provided by STEMCELL and its suppliers is correct, it makes no warranties or representations as to the accuracy or completeness of such information.