#### Rat IgG1, kappa Isotype Control Antibody, Clone RTK2071, Alexa Fluor® 488

## **Antibodies**

Rat monoclonal IgG1, kappa isotype control antibody, Alexa Fluor® 488-conjugated

Catalog #60075AD

100 μg 0.5 mg/mL



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

## **Product Description**

The RTK2071 antibody (IgG1, 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 used. If a conjugated antibody is used, 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 RTK2071 antibody recognizes keyhole limpet hemocyanin (KLH) 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: IgG1 Isotype Control

Alternative Names: Not applicable

Gene ID: Not applicable

Species Reactivity: Not applicable

Host Species: Rat

Clonality: Monoclonal
Clone: RTK2071
Isotype: IgG1, kappa

Immunogen: Trinitrophenol + KLH
Conjugate: Alexa Fluor® 488

# **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; FACS: Fluorescence-activated cell sorting; 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 Alexa Fluor® 488 under optimal

conditions.

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: The suggested use of this antibody is at concentrations comparable to those of the specific antibody of

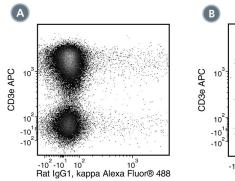
interest.

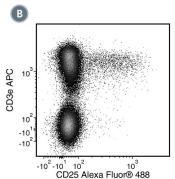
## **Antibodies**

# Rat IgG1, kappa Isotype Control Antibody, Clone RTK2071, Alexa Fluor® 488



#### Data





(A) Flow cytometry analysis of C57BL/6 mouse splenocytes (gated on lymphocytes) labeled with Rat IgG1, kappa Isotype Control Antibody, Clone RTK2071, Alexa Fluor® 488 and Anti-Mouse CD3e Antibody, Clone 145-2C11, APC (Catalog #60015AZ).

(B) Flow cytometry analysis of C57BL/6 mouse splenocytes (gated on lymphocytes) labeled with an anti-mouse CD25 antibody, Alexa Fluor® 488 and Anti-Mouse CD3e Antibody, Clone 145-2C11, 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

- Khan AM et al. (2015) Telomere dysfunction reduces microglial numbers without fully inducing an aging phenotype. Neurobiol Aging 36(6): 2164–75.
   (IHC)
- 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. Stoler-Barak L et al. (2015) Heparanase of murine effector lymphocytes and neutrophils is not required for their diapedesis into sites of inflammation. FASEB J 29(5): 2010–21. (FC)
- 4. Urbanellis P et al. (2015) The regulatory T cell effector molecule fibrinogen-like protein 2 is necessary for the development of rapamycin-induced tolerance to fully MHC-mismatched murine cardiac allografts. Immunology 144(1): 91–106. (FA)
- 5. Dakhama A et al. (2013) IL-13-producing BLT1-positive CD8 cells are increased in asthma and are associated with airway obstruction. Allergy 68(5): 666–73. (IF)
- 6. Crispín JC et al. (2012) Cutting edge: protein phosphatase 2A confers susceptibility to autoimmune disease through an IL-17-dependent mechanism. J Immunol 188(8): 3567–71. (FA)
- 7. Yi H et al. (2012) Mouse CD11b+Gr-1+ myeloid cells can promote Th17 cell differentiation and experimental autoimmune encephalomyelitis. J Immunol 189(9): 4295–304. (FC, IF, IHC)
- 8. Yi H et al. (2011) Targeting the immunoregulator SRA/CD204 potentiates specific dendritic cell vaccine-induced T-cell response and antitumor immunity. Cancer Res 71(21): 6611–20. (FC)
- 9. Wondimu Z et al. (2010) Protective role of interleukin-17 in murine NKT cell-driven acute experimental hepatitis. Am J Pathol 177(5): 2334–46. (FA) 10. Hegde S et al. (2007) NKT cells direct monocytes into a DC differentiation pathway. J Leukoc Biol 81(5): 1224–35. (FA)
- 11. Riemann M et al. (2005) The IkappaB protein Bcl-3 negatively regulates transcription of the IL-10 gene in macrophages. J Immunol 175(6): 3560–8. (FA)

STEMCELL TECHNOLOGIES INC.'S QUALITY MANAGEMENT SYSTEM IS CERTIFIED TO ISO 13485. PRODUCTS ARE FOR RESEARCH USE ONLY AND NOT INTENDED FOR HUMAN OR ANIMAL DIAGNOSTIC OR THERAPEUTIC USES UNLESS OTHERWISE STATED.

Copyright © 2017 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 Canada Inc. All other trademarks are the property of their respective holders. Alexa Fluor® is a registered trademark of Life Technologies Corporation. Antibodies conjugated to Alexa Fluor® are licensed for internal research use only and sale is expressly conditioned on the buyer not using the antibody 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.