

## Antibodies

### Rat IgG1, kappa Isotype Control Antibody, Clone RTK2071

Rat monoclonal IgG1, kappa isotype  
control antibody, unconjugated

Catalog #60075  
#60075.1

500 µg 0.5 mg/mL  
50 µg 0.5 mg/mL



Scientists Helping Scientists™ | [WWW.STEMCELL.COM](http://WWW.STEMCELL.COM)

TOLL FREE PHONE 1 800 667 0322 • PHONE +1 604 877 0713

[INFO@STEMCELL.COM](mailto:INFO@STEMCELL.COM) • [TECHSUPPORT@STEMCELL.COM](mailto: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:	Unconjugated

## Applications

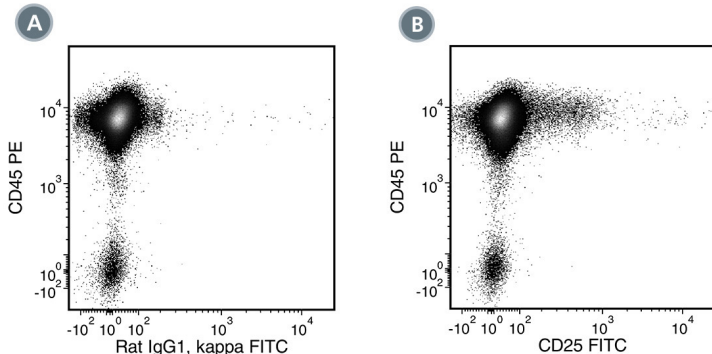
Verified:	FC
Reported:	FA, FC, ICC, IF, IHC, IP, WB
Special Applications:	This antibody clone has been verified for use as an isotype control antibody for assessing non-specific binding to cells in flow cytometry applications.

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.
Stability and Storage:	Product stable at 2 - 8°C when stored undiluted. Do not freeze. For product expiry date, please contact <a href="mailto:techsupport@stemcell.com">techsupport@stemcell.com</a> .
Directions for Use:	The suggested use of this antibody is at concentrations comparable to those of the specific antibody of interest.

## Data



(A) Flow cytometry analysis of C57BL/6 mouse splenocytes (gated on lymphocytes) labeled with Rat IgG1, kappa Isotype Control Antibody, Clone RTK2071, followed by a mouse anti-rat IgG1 antibody, FITC and Anti-Mouse CD45 Antibody, Clone 30-F11, PE (Catalog #60030PE).

(B) Flow cytometry analysis of C57BL/6 mouse splenocytes (gated on lymphocytes) labeled with Anti-Mouse CD25 Antibody, Clone PC61.5 (Catalog #60009), followed by a mouse anti-rat IgG1 antibody, FITC and Anti-Mouse CD45 Antibody, Clone 30-F11, PE.

## 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](http://www.stemcell.com/antibodies) or contact us at [techsupport@stemcell.com](mailto:techsupport@stemcell.com).

## References

1. 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<sup>-</sup> 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. Crispin 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<sup>+</sup>Gr-1<sup>+</sup> 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 I kappa B 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](mailto: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.