

## Antibodies

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

Rat monoclonal IgG1, kappa isotype  
control antibody, biotin-conjugated

Catalog #60075BT  
#60075BT.1

200 µg 0.5 mg/mL  
50 µg 0.5 mg/mL



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## 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:	Biotin

## Applications

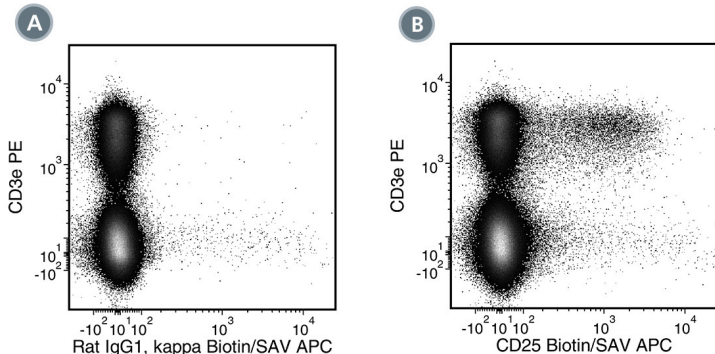
Verified:	FC
Reported:	FC
Special Applications:	This antibody clone has been verified for use as an isotype control antibody for assessing non-specific binding to cells in flow cytometry applications.

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; 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 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



(A) Flow cytometry analysis of C57BL/6 mouse splenocytes (gated on lymphocytes) labeled with Rat IgG1, kappa Isotype Control Antibody, Clone RTK2071, Biotin, followed by streptavidin (SAV) APC and Anti-Mouse CD3e Antibody, Clone 145-2C11, PE (Catalog #60015PE).

(B) Flow cytometry analysis of C57BL/6 mouse splenocytes (gated on lymphocytes) labeled with Anti-Mouse CD25 Antibody, Clone PC61.5, Biotin (Catalog #60009BT), followed by SAV APC and Anti-Mouse CD3e Antibody, Clone 145-2C11, 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- 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+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 I kappa B protein Bcl-3 negatively regulates transcription of the IL-10 gene in macrophages. *J Immunol* 175(6): 3560–8. (FA)

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