

Anti-Mouse Ly-6C Antibody, Clone HK1.4, PerCP-Cy5.5

Rat monoclonal antibody against mouse Ly-6C, PerCP-Cy5.5-conjugated

Catalog #100-1638

100 µg

0.2 mg/mL

Product Description

This monoclonal antibody reacts with mouse lymphocyte antigen 6 family member C (Ly-6C), a 14 - 17 kDa glycosylphosphatidylinositol (GPI)-linked protein of the Ly6 family. Ly-6C is expressed on monocytes, macrophages, endothelial cells, granulocytes, and a subset of lymphocytes. It has been reported that Ly-6C is an indicator of memory CD8⁺ T cells. Ly-6C is regulated by interferon gamma and may play a role in the development and maturation of lymphocytes. Some variation of Ly-6C expression on CD4 and CD8 lymphocytes is found in different mouse strains. Mouse strains with the Ly-6.2 alloantigen have subsets of CD4 and CD8 cells that express Ly-6.2, whereas strains with the Ly-6.1 alloantigen possess only Ly-6.1⁺ CD8 subsets.

Target Antigen:	Ly-6C
Alternative Names:	Ly6C, Ly-6C1
Gene ID:	17067
Species Reactivity:	Mouse
Host Species:	Rat
Clonality:	Monoclonal
Clone:	HK1.4
Isotype:	IgG2c, kappa
Immunogen:	Mouse CTL clone L3
Conjugate:	PerCP-Cy5.5 (Peridinin chlorophyll protein complex-Cyanine5.5)

Applications

Verified Applications: FC

Reported Applications: FC

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FACS: Fluorescence-activated cell sorting; FC: Flow cytometry; FCXM: Flow cytometric crossmatch assay; FISH: Fluorescence in situ hybridization; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IHC-F: Immunohistochemistry (frozen-tissue); IHC-P: Immunohistochemistry (paraffin-embedded); IP: Immunoprecipitation; NMR: Nuclear magnetic resonance spectroscopy; RIA: Radioimmunoassay; WB: Western blotting

Properties

Product Formulation: Phosphate-buffered saline, pH 7.2, containing 0.09% sodium azide and 0.1% gelatin

Purification: The antibody was purified by affinity chromatography and conjugated with PerCP-Cy5.5 under optimal conditions. The solution is free of unconjugated PerCP-Cy5.5.

Stability and Storage: Product stable at 2 - 8°C when stored undiluted. Do not freeze. Protect product from prolonged exposure to light. Stable until expiry date (EXP) on label.

Directions for Use: For flow cytometry, the suggested use of this antibody is $\leq 1 \mu\text{g}$ per 1×10^6 cells in 100 μL . It is recommended that the antibody be titrated for optimal performance for each application.

Related Products

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

References

- Greite R et al. (2018) Renal ischemia-reperfusion injury causes hypertension and renal perfusion impairment in the CD1 mice which promotes progressive renal fibrosis. *Am J Physiol Renal Physiol* 314(5): F881–92.
- Johnson R et al. (1993) Accessory molecules involved in antigen-mediated cytotoxicity and lymphokine production by cytotoxic T lymphocyte subsets. I. Identification of functions for the T cell surface molecules Ly-6C and Thy-1. *J Immunol* 151(6): 2986–99.
- Moreno-Vicente J et al. (2022) Fc-null anti-PD-1 monoclonal antibodies deliver optimal checkpoint blockade in diverse immune environments. *J Immunother Cancer* 10(1): e003735.
- Pflugh DL et al. (2002) Ly-6 superfamily members Ly-6A/E, Ly-6C, and Ly-6I recognize two potential ligands expressed by B lymphocytes. *J Immunol* 169(9): 5130–6.
- Reich B et al. (2013) Fibrocytes develop outside the kidney but contribute to renal fibrosis in a mouse model. *Kidney Int* 84(1): 78–89.
- Shevach EM & Korty PE. (1989) Ly-6: a multigene family in search of a function. *Immunol Today* 10(6): 195–200.
- Way GW et al. (2023) Optimization of high throughput spectral flow cytometry for immune cell profiling in mouse liver. *Liver Res* 7(3): 263–71.

PRODUCTS ARE FOR RESEARCH USE ONLY AND NOT INTENDED FOR HUMAN OR ANIMAL DIAGNOSTIC OR THERAPEUTIC USES UNLESS OTHERWISE STATED.

Copyright © 2024 by STEMCELL Technologies Inc. All rights reserved including graphics and images. STEMCELL Technologies & Design, STEMCELL Shield Design, and Scientists Helping Scientists are trademarks of STEMCELL Technologies Canada Inc. All other trademarks are the property of their respective holders. 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.