

## Anti-Mouse CD45 Antibody, Clone 30-F11, PerCP-Cy5.5



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

## Antibodies

Rat monoclonal IgG2b antibody  
against mouse CD45, PerCP-Cy5.5-  
conjugated

Catalog #60030PS  
#60030PS.1

100 µg 0.2 mg/mL  
25 µg 0.2 mg/mL

## Product Description

The 30-F11 antibody reacts with an extracellular epitope found on all isoforms and both alloantigens (CD45.1 and CD45.2) of mouse CD45, a type I transmembrane glycoprotein expressed on the surface of most hematopoietic cells except mature erythrocytes, platelets and plasma cells; expression of CD45 is lost during differentiation of these cell types. CD45 is a member of the protein tyrosine phosphatase family and functions in a number of immunoregulatory processes, including cell activation, growth, differentiation and oncogenic transformation. The large cytoplasmic portion of CD45 contains two tyrosine phosphatase domains, one which is enzymatically active, that are involved in modulating the function of intracellular substrates such as the Src kinases Lck and Fyn. Several isoforms of CD45 have been identified, the expression of which differs according to cell type and functional status. Alternative splicing of three exons (4, 5, 6) encoding the extracellular RA, RB and RC polypeptide sequences gives rise to up to 8 isoforms with molecular masses in the range of 180 - 240 kDa.

Target Antigen Name:	CD45
Alternative Names:	LCA, Leukocyte common antigen, Ly-5, Protein tyrosine phosphatase receptor type C, PTPRC, T200
Gene ID:	19264
Species Reactivity:	Mouse
Host Species:	Rat (LOU)
Clonality:	Monoclonal
Clone:	30-F11
Isotype:	IgG2b, kappa
Immunogen:	Mouse thymus or spleen
Conjugate:	PerCP-Cy5.5

## Applications

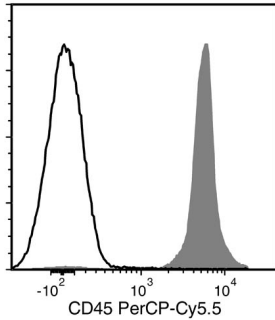
Verified:	FC
Reported:	FC
Special Applications:	This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including EasySep™ Mouse CD19 Positive Selection Kit II (Catalog #18954).

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:	Aqueous buffer containing 0.09% sodium azide, may contain carrier protein/stabilizer
Purification:	The antibody was purified by affinity chromatography and conjugated with PerCP-Cy5.5 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 <a href="mailto:techsupport@stemcell.com">techsupport@stemcell.com</a> .
Directions for Use:	For flow cytometry the suggested use of this antibody is $\leq 0.125 \mu\text{g}$ per $1 \times 10^6$ cells in 100 µL volume. It is recommended that the antibody be titrated for optimal performance for each application.

## Data



Flow cytometry analysis of C57BL/6 mouse splenocytes labeled with Anti-Mouse CD45 Antibody, Clone 30-F11, PerCP-Cy5.5 (filled histogram) or a rat IgG2b, kappa PerCP-Cy5.5 isotype control antibody (solid line histogram).

## 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. Cunha MCR et al. (2013) Protein malnutrition induces bone marrow mesenchymal stem cells commitment to adipogenic differentiation leading to hematopoietic failure. *PLoS One* 8(3): e58872. (FC)
2. Treviño-Villarreal JH et al. (2011) Host-derived pericytes and Sca-1+ cells predominate in the MART-1- stroma fraction of experimentally induced melanoma. *J Histochem Cytochem* 59(12): 1060–75. (CellSep)
3. McKinney-Freeman SL et al. (2009) Surface antigen phenotypes of hematopoietic stem cells from embryos and murine embryonic stem cells. *Blood* 114(2): 268–78. (CellSep, FC/FACS)
4. Dorrell C et al. (2008) Surface markers for the murine oval cell response. *Hepatology* 48(4): 1282–91. (FC/FACS)
5. Tan J et al. (1999) Microglial activation resulting from CD40-CD40L interaction after beta-amyloid stimulation. *Science* 286(5448): 2352–5. (IHC)
6. Tamaki K et al. (1996) Identification and characterization of novel dermal Thy-1 antigen-bearing dendritic cells in murine skin. *J Invest Dermatol* 106(3): 571–5. (IF, IHC)
7. Ledbetter JA & Herzenberg LA. (1979) Xenogeneic monoclonal antibodies to mouse lymphoid differentiation antigens. *Immunol Rev* 47: 63–90. (FA, FC, RIA)

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 © 2016 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](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.