

**Anti-Human CD43 Antibody,  
Clone CD43-10G7, PE**



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

Mouse monoclonal IgG1 antibody  
against human CD43, PE-conjugated

Catalog #60085PE  
#60085PE.1

100 tests 5 µL/test  
25 tests 5 µL/test

FOR RESEARCH USE ONLY. NOT INTENDED FOR HUMAN OR ANIMAL DIAGNOSTIC OR THERAPEUTIC USES.

## Product Description

The CD43-10G7 antibody reacts with human CD43, a type I transmembrane sialoglycoprotein expressed on the surface of most human hematopoietic cells, including thymocytes, peripheral T cells, NK cells, monocytes, granulocytes, some B cells (activated B cells and an early B cell subset in bone marrow), plasma cells, and hematopoietic progenitor cells. Low expression levels are observed on platelets. CD43 exhibits different glycoforms in the range of ~95 - 135 kDa, depending on the cell type. It binds ligands such as CD54 and CD169 (Siglec-1) and plays regulatory roles in cell adhesion and activation, apoptosis and tumor progression, and is used as a marker for discriminating normal from neoplastic T cells and B cells within tissues. Binding of the CD43-10G7 antibody to CD43 on neutrophils reportedly induces homotypic cell adhesion.

Target Antigen Name:	CD43
Alternative Names:	Leukocyte sialoglycoprotein, Leukosialin, Ly-48, Sialophorin, W3/13
Gene ID:	6693
Species Reactivity:	Human
Host Species:	Mouse (BALB/c)
Clonality:	Monoclonal
Clone:	CD43-10G7
Isotype:	IgG1, kappa
Immunogen:	MV4-11 human myelomonocytic cell line
Conjugate:	PE

## Applications

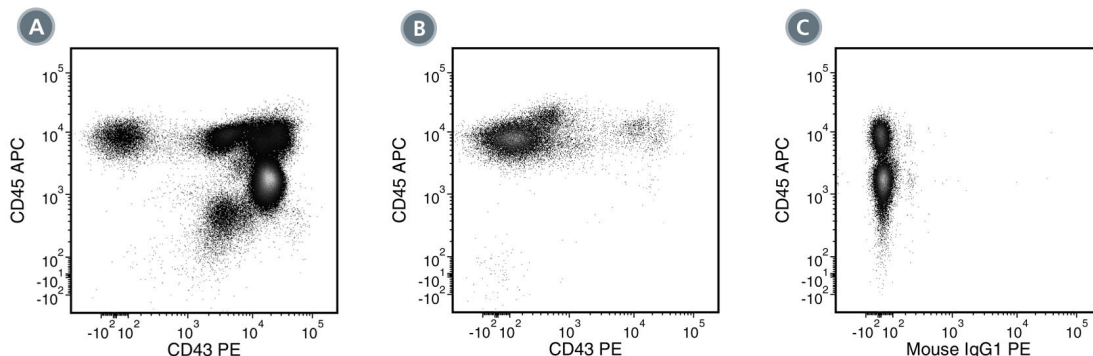
Verified:	FC
Reported:	FC
Special Applications:	This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including EasySep™ HLA Whole Blood B Cell Positive Selection Kit (Catalog #18184HLA) and EasySep™ HLA B Cell Positive Selection Kit (Catalog #18454HLA).

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; WB: Western blotting

## Properties

Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) bovine serum albumin
Purification:	The antibody was purified by affinity chromatography and conjugated with PE under optimal conditions. The solution is free of unconjugated PE and unconjugated antibody.
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 5 µL per 1 x 10 <sup>6</sup> cells in 100 µL volume or per 100 µL of whole blood. It is recommended that the antibody be titrated for optimal performance for each application.

## Data



(A) Flow cytometry analysis of human buffy coat nucleated cells labeled with Anti-Human CD43 Antibody, Clone CD43-10G7, PE and Anti-Human CD45 Antibody, Clone HI30, APC (Catalog #60018AZ).

(B) Flow cytometry analysis of human buffy coat nucleated cells processed with the EasySep™ HLA Whole Blood B Cell Positive Selection Kit and labeled with Anti-Human CD43 Antibody, Clone CD43-10G7, PE and Anti-Human CD45 Antibody, Clone HI30, APC. Note: CD43 is not expressed on resting B cells.

(C) Flow cytometry analysis of human buffy coat nucleated cells labeled with a mouse IgG1, kappa PE isotype control antibody and Anti-Human CD45 Antibody, Clone HI30, 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](http://www.stemcell.com/antibodies) or contact us at [techsupport@stemcell.com](mailto:techsupport@stemcell.com).

## References

1. Rosenstein Y, et al. CD43, a molecule defective in Wiskott-Aldrich syndrome, binds ICAM-1. *Nature* 354(6350): 233-35, 1991
2. Rosenkranz AR, et al. Induction of neutrophil homotypic adhesion via sialophorin (CD43), a surface sialoglycoprotein restricted to haemopoietic cells. *Immunology* 80(3): 431-38, 1993 (FA)
3. Barclay AN, et al. Eds. *The Leukocyte Antigens Facts Book*, 2nd Edition, Academic Press, New York, p. 238, 1997
4. Skubitz KM, et al. CD43 is associated with tyrosine kinase activity in human neutrophils. *J Leukoc Biol* 1998 64(6): 800-02 (IP)
5. Vuyyuru R, et al. Characteristics of *Borrelia hermsii* infection in human hematopoietic stem cell-engrafted mice mirror those of human relapsing fever. *Proc Natl Acad Sci USA* 108(51): 20707-12, 2011 (FC)
6. Nakajima-Takagi Y, et al. Role of SOX17 in hematopoietic development from human embryonic stem cells. *Blood* 121(3): 447-58, 2013 (FC)

Copyright © 2013 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.

STEMCELL TECHNOLOGIES INC.'S QUALITY MANAGEMENT SYSTEM IS CERTIFIED TO ISO 13485 MEDICAL DEVICE STANDARDS.