

Anti-Human CD34 Antibody, Clone 563, PE



Scientists Helping Scientists™ | WWW.STEMCELL.COM

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

INFO@STEMCELL.COM • TECHSUPPORT@STEMCELL.COM

FOR GLOBAL CONTACT DETAILS VISIT OUR WEBSITE

Antibodies

Mouse monoclonal IgG1 antibody
against human, rhesus, cynomolgus
CD34, PE-conjugated

Catalog #60119PE

50 tests 20 µL/test

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

Product Description

CD34 is an ~105 - 120 kDa type 1 transmembrane glycoprotein expressed on the surface of most human hematopoietic stem and progenitor cells (HSPCs) as well as on endothelial cells, and some tumor cell lines. The frequency of CD34+ cells is low in bone marrow (1 - 4%), cord blood (~1%), and peripheral blood (< 0.1%). CD34 is used to identify and isolate HSPCs, including those capable of reconstituting hematopoiesis after transplantation. Distinct epitope groups have been assigned to CD34 based on differences in the structure of carbohydrate groups, which affects their sensitivity to enzymatic cleavage. The 563 antibody recognizes a class III epitope (resistant to neuraminidase and O-glycoprotease). Clone 563 also cross reacts with CD34+ cells of rhesus, cynomolgus, and pigtailed macaque monkeys, but not baboons.

Target Antigen Name:	CD34
Alternative Names:	Gp105-120, My10
Gene ID:	947
Species Reactivity:	Human, Rhesus, Cynomolgus, Chimpanzee, Pigtailed macaque
Host Species:	Mouse
Clonality:	Monoclonal
Clone:	563
Isotype:	IgG1, kappa
Immunogen:	Human CD34+ leukemic cells
Conjugate:	PE

Applications

Verified:	FC
Reported:	FC, IF

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

Properties

Formulation:	Aqueous buffer containing $\leq 0.09\%$ sodium azide and 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 techsupport@stemcell.com .
Directions for Use:	For flow cytometry the suggested use of this antibody is 20 µL per 1×10^6 cells in 100 µL volume. 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, please visit our website at www.stemcell.com/antibodies or contact us at techsupport@stemcell.com.

References

1. Steen R & Egeland T. (1998) CD34 molecule epitope distribution on cells of haematopoietic origin. *Leuk Lymphoma* 30(1-2): 23–30.
2. Egeland T et al. (1993) Positive selection of bone marrow-derived CD34 positive cells for possible stem cell transplantation. *Transplant Proc* 25(1 Pt 2): 1261–3.
3. Strauss LC et al. (1986) Antigenic analysis of hematopoiesis. V. Characterization of My-10 antigen expression by normal lymphohematopoietic progenitor cells. *Exp Hematol* 14(9): 878–86.
4. Civin CI et al. (1984) Antigenic analysis of hematopoiesis. III. A hematopoietic progenitor cell surface antigen defined by a monoclonal antibody raised against KG-1a cells. *J Immunol* 133(1): 157–65.

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 and Scientists Helping Scientists are trademarks of STEMCELL Technologies 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.