



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

Technically
Speaking

CEDARLANE[®]
www.cedarlanelabs.com



Conveniently Delivering You Today's Innovations
for the Science of Tomorrow™

Mouse anti-CD34 Monoclonal Antibody

CLX462AP
CLX462F
CLX462PE
CLX462APC

Clone: 581

Isotype: Mouse IgG1

Specificity:

The mouse monoclonal antibody 581 reacts with CD34 (Mucosialin), a 110-115 kDa monomeric transmembrane phosphoglycoprotein expressed on hematopoietic progenitors cells and on the most pluripotential stem cells; it is gradually lost on progenitor cells. The antibody recognizes the class III CD34 epitope resistant to neuraminidase, chymopapain and glycoprotease. HLDA V.; WS Code MA27.

Species Reactivity: Human, Non-Human Primates

Application: Flow Cytometry; Immunohistochemistry (frozen sections).

Conjugate Preparation:

The purified antibody is conjugated with Fluorescein isothiocyanate (FITC), R-Phycoerythrin (PE) or cross-linked Allophycocyanin (APC) under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.

Presentation:

Purified: 0.1 mg (1 mg/mL) purified IgG buffered in PBS with 15 mM sodium azide, approx. pH 7.4. (Purified from hybridoma culture supernatant by protein-A affinity chromatography).

FITC: 0.4 mL of FITC conjugated IgG buffered in in stabilizing phosphate buffered saline (PBS) solution containing 15mM sodium azide. Sufficient for 100 tests.

PE: 2 mL of PE conjugated IgG buffered in in stabilizing phosphate buffered saline (PBS) solution containing 15mM sodium azide. Sufficient for 100 tests.

APC: 1 mL of APC conjugated IgG buffered in in stabilizing phosphate buffered saline (PBS) solution containing 15mM sodium azide. Sufficient for 100 tests.

Continued Overleaf.....

Visit our website for your local distributor.

CEDARLANE[®]



www.cedarlanelabs.com

An ISO 9001:2000 and ISO 13485:2003
registered company.

In CANADA: **Toll Free: 1-800-268-5058**

4410 Paletta Court, Burlington, ON L7L 5R2 ph: (289) 288-0001, fax: (289) 288-0020
e-mail: general@cedarlanelabs.com

In the USA: **Toll Free: 1-800-721-1644**

1210 Turrentine Street, Burlington, NC 27215 ph: (336) 513-5135, fax: (336) 513-5138
e-mail: service@cedarlanelabs.com

Storage / Stability:

Store in the dark at 2-8°C. Do not freeze all formats. Avoid prolonged exposure to light of conjugates. Do not use after expiration date stamped on vial label.

Usage:

Recommended dilutions for Flow Cytometry analysis of human blood cells using:

Purified: 5 µg/ml

FITC: 4 µl reagent / 100 µl of whole blood or 10⁶ cells in a suspension.

PE: 20 µl reagent / 100 µl of whole blood or 10⁶ cells in a suspension.

APC: 10 µl reagent / 100 µl of whole blood or 10⁶ cells in a suspension.

Background:

CD34 is a highly glycosylated monomeric 111-115 kDa surface protein, which is present on many stem cell populations. It is a well established stem cell marker, though its expression on human hematopoietic stem cells is reversible. CD34 probably serves as a surface receptor that undergoes receptor-mediated endocytosis and regulates adhesion, differentiation and proliferation of hematopoietic stem cells and other progenitors. CD34 expression is likely to represent a specific state of hematopoietic development that may have altered adhering properties with expanding and differentiating capabilities in both *in vitro* and *in vivo* conditions.

References:

*Ando K, Nakamura Y, Chargui J, Matsuzawa H, Tsuji T, Kato S, Hotta T: Extensive generation of human cord blood CD34(+) stem cells from Lin(-)CD34(-) cells in a long-term in vitro system. *Exp Hematol.* 2000 Jun;28(6):690-9.

*Janowska-Wieczorek A, Marquez LA, Nabholz JM, Cabuhat ML, Montañó J, Chang H, Rozmus J, Russell JA, Edwards DR, Turner AR: Growth factors and cytokines upregulate gelatinase expression in bone marrow CD34(+) cells and their transmigration through reconstituted basement membrane. *Blood.* 1999 May 15;93(10):3379-90.

*Felschow DM, McVeigh ML, Hoehn GT, Civin CI, Fackler MJ: The adapter protein CrkL associates with CD34. *Blood.* 2001 Jun 15;97(12):3768-75.

*Kato S, Ando K, Nakamura Y, Muguruma Y, Sato T, Yabe H, Yabe M, Hattori K, Yasuda Y, Hotta T: Absence of a CD34- hematopoietic precursor population in recipients of CD34+ stem cell transplantation. *Bone Marrow Transplant.* 2001 Sep;28(6):587-95.

*Suárez L, Vidriales MB, García-Laraña J, Sanz G, Moreno MJ, López A, Barrena S, Martínez R, Tormo M, Palomera L, Lavilla E, López-Berges MC, de Santiago M, de Equiza ME, Miguel JF, Orfao A: CD34+ cells from acute myeloid leukemia, myelodysplastic syndromes, and normal bone marrow display different apoptosis and drug resistance-associated phenotypes. *Clin Cancer Res.* 2004 Nov 15;10(22):7599-606.

*Ono F, Sharma BK, Smith CC, Burnett JW, Aurelian L: CD34+ cells in the peripheral blood transport herpes simplex virus DNA fragments to the skin of patients with erythema multiforme (HAEM). *J Invest Dermatol.* 2005 Jun;124(6):1215-24.

*Ninos JM, Jefferies LC, Cogle CR, Kerr WG: The thrombopoietin receptor, c-Mpl, is a selective surface marker for human hematopoietic stem cells. *J Transl Med.* 2006 Feb 16;4:9.

*Iwasaki H, Kawamoto A, Ishikawa M, Oyamada A, Nakamori S, Nishimura H, Sadamoto K, Horii M, Matsumoto T, Murasawa S, Shibata T, Suehiro S, Asahara T: Dose-dependent contribution of CD34-positive cell transplantation to concurrent vasculogenesis and cardiomyogenesis for functional regenerative recovery after myocardial infarction. *Circulation.* 2006 Mar 14;113(10):1311-25.

*Goardon N, Nikolousis E, Sternberg A, Chu WK, Craddock C, Richardson P, Benson R, Drayson M, Standen G, Vyas P, Freeman S: Reduced CD38 expression on CD34+ cells as a diagnostic test in myelodysplastic syndromes. *Haematologica.* 2009 Aug;94(8):1160-3.

*Sanz E, Muñoz-A N, Monserrat J, Van-Den-Rym A, Escoll P, Ranz I, Alvarez-Mon M, de-la-Hera A: Ordering human CD34+CD10-CD19+ pre/pro-B-cell and CD19- common lymphoid progenitor stages in two pro-B-cell development pathways. *Proc Natl Acad Sci U S A.* 2010 Mar 30;107(13):5925-30.

Laboratory Reagent For Research Use Only