

Monoclonal Antibody CD34

PN IM0787 –100 tests– Liquid – 20µL/test – Clone QBend10

For Research Use Only. Not for use in diagnostic procedures.

SPECIFICITY

The CD34 antigen is a monomeric transmembrane phosphoglycoprotein of about 110 kDa with two distinct extracellular domains. The membrane proximal domain, of about 110 amino acids, probably adopts a globular conformation. The NH₂-terminal domain, of about 140 amino acids, is heavily glycosylated with both N-linked glycans and sialylated O-linked carbohydrates and probably exhibits an extended rod-like structure typical of mucin-like glycoproteins.

The CD34 antigen is expressed on hematopoietic progenitor cells of all lineages as well as the most pluripotential stem cells. CD34 antigen expression is highest on the most primitive stem cells and is gradually lost as lineage committed progenitors differentiate.

The CD34 antigen is also present on capillary endothelial cells and on bone marrow stromal cells. Variations of glycosylation are thought to occur during normal hematopoiesis depending of lineage commitment and the level of cellular maturation.

QBend10 monoclonal antibody (mAb) recognizes a Pasteurella glycoprotease-sensitive class II epitope.

QBend10 reacts with early normal hematopoietic progenitor cells, and with vascular endothelial cells.

The QBend10 mAb has been assigned to the CD34 cluster of differentiation at the fourth International Workshop on Human Leucocyte Differentiation Antigens held in Vienna, Austria, in 1989 (1).

REAGENT

CD34-Purified Monoclonal Antibody
PN IM0787 - 100 tests - Liquid - 20µL/test

Clone	QBend10
Isotype	IgG1, Mouse
Immunogen	Endothelial cell (HUVEC)
Hybridoma	NSO x NZB spleen B cells
Source	Ascitic fluid
Purification	Ion exchange or affinity chromatography

REAGENT CONTENTS

This antibody is provided in phosphate-buffered saline, containing 0.1% sodium azide and 2 mg/mL bovine serum albumin.

APPLICATION

Flow cytometry.

STATEMENTS OF WARNING

1. This reagent contains 0.1% sodium azide. Sodium azide under acid conditions yields hydrazoic acid, an extremely toxic compound. Azide compounds should be flushed with running water while being discarded. These precautions are recommended to avoid deposits in metal piping in which explosive conditions can develop. If skin or eye contact occurs, wash excessively with water.
2. Specimens, samples and all material coming in contact with them should be handled as if capable of transmitting infection and disposed of with proper precautions.
3. Never pipet by mouth and avoid contact of samples with skin and mucous membranes.
4. Do not use antibody beyond the expiration date on the label.
5. Do not expose reagents to strong light during storage or incubation.
6. Avoid microbial contamination of reagents or incorrect results might occur.
7. Use good laboratory practices when handling this reagent.

STORAGE CONDITIONS AND STABILITY

This reagent is stable up to the expiration date when stored at 2 – 8°C. Do not freeze.

REAGENT PREPARATION

No reconstitution is necessary. This monoclonal antibody may be used directly from the vial. Bring reagent to 18 – 25°C prior to use.

PROCEDURE

This reagent is designed for Flow Cytometry. Assay volume: 20 µL per 5 x 10⁵ cells in one test, or per 100 µL whole blood.

SELECTED RESEARCH REFERENCES

1. Civin, C.L., Trischmann, T.M., Fackler, M.J., Bernstein, I.D., Buhring, H-J., Campos, L., Greaves, M.F., Kamoun, M., Katz, D.R., Lansdorp, P.M., Look, A.T., Seed, B., Sutherland, D.R., Tindle, R.W., Uchanska-Ziegler, B., "Summary of CD34 cluster workshop section", 1989, Leucocyte Typing IV, Knapp, W., et al., Eds., Oxford University Press, 818-825.

TRADEMARKS

Beckman Coulter, the Beckman Coulter logo, COULTER, are registered trademarks of Beckman Coulter, Inc.

MANUFACTURED BY:

IMMUNOTECH SAS
a Beckman Coulter Company
130, avenue de Lattre de Tassigny
B.P. 177 - 13276 Marseille Cedex 9
France

For additional information in the USA, call 800-526-7694.

Outside the USA, contact your local Beckman Coulter representative.

www.beckmancoulter.com

Printed in France.

Made in France.

©2008 Beckman Coulter, Inc.
All Rights Reserved

