

## Polyclonal Anti- CD34

**Catalogue No.** PA1334

**Lot No.** 0131012223499

**Ig type:** rabbit IgG

**Size:** 100µg/vial

**Form:** lyophilized

### Specificity

Human, mouse, rat

No cross reactivity with other proteins.

### Recommended application

*Western blot*

*Immunohistochemistry(P)*

*Immunohistochemistry(F)*

### Immunogen

A synthetic peptide corresponding to a sequence at the C-terminal of human CD34 (366-382 aa QATSRNGHSARQHVVAD), identical to the related mouse and rat sequences.

### Purification

Immunogen affinity purified.

### Application

	Concentration	Tested Species	Concluded Species	Antigen Retrieval
WB	0.1-0.5µg/ml	Hu,Rat,Ms	-	-
IHC-P	0.5-1µg/ml	Hu,Rat,Ms	-	By Heat
IHC-F	0.5-1µg/ml	Rat,Ms	Hu	-

*Other applications have not been tested.*

*Optimal dilutions should be determined by end user.*

### Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Thimerosal, 0.05mg NaN<sub>3</sub>.

### Reconstitution

0.2ml of distilled water will yield a concentration of 500µg/ml.

### Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time.

Avoid repeated freezing and thawing.

### Relevant detection systems

Boster provides a series of assays reacted with primary antibodies. Antibody can be supported by chemiluminescence kit EK1002 in WB, supported by SA1022 in IH.

## **BACKGROUND**

CD34 is a monomeric cell surface antigen with a molecular mass of approximately 110 KD. CD34 is expressed in humans in hematopoietic stem cells, vascular endothelium, and blasts from 30% of patients with acute myeloid and lymphocytic leukemia. The human CD34 gene spans 26 kb and has 8 exons, a structure quite similar to that of the murine gene.<sup>1</sup> By Southern blot analysis of DNA from a panel of human x mouse somatic cell hybrids using a CD34 cDNA probe demonstrate that the gene for CD34 is located on human chromosome 1 in the 1q12----qter region.<sup>2</sup> CD34 plays an important role in the formation of progenitor cells during both embryonic and adult hematopoiesis.<sup>3</sup>

## **REFERENCE**

- 1、 Satterthwaite, A. B., Burn, T. C., Le Beau, M. M., Tenen, D. G. Structure of the gene encoding CD34, a human hematopoietic stem cell antigen. *Genomics* 12: 788-794, 1992.
- 2、 Tenen, D. G., Satterthwaite, A. B., Borson, R., Simmons, D., Eddy, R. L., Shows, T. B. Chromosome 1 localization of the gene for CD34, a surface antigen of human stem cells. *Cytogenet. Cell Genet.* 53: 55-57, 1990.
- 3、 Cheng, J., Baumhueter, S., Cacalano, G., Carver-Moore, K., Thibodeaux, H., Thomas, R., Broxmeyer, H. E., Cooper, S., Hague, N., Moore, M., Lasky, L. A. Hematopoietic defects in mice lacking the sialomucin CD34. *Blood* 87: 479-490, 1996.