

Rat anti-Mouse CD34, clone MEC14.7 (Monoclonal)

Clone no. MEC14.7

MONOSAN

Product name	Rat anti-Mouse CD34, clone MEC14.7 (Monoclonal)
Host	Rat
Applications	IHC-fr, IHC-P, FC, IF, IP, WB
Species reactivity	mouse
Conjugate	-
Immunogen	Unknown or proprietary to MONOSAN and/or its suppliers
Isotype	IgG2a
Clonality	Monoclonal
Clone number	MEC14.7
Size	1 ml
Concentration	100 ug/ml
Format	-
Storage buffer	PBS with 0.1% BSA and 0.02% sodium azide
Storage until expiry date	2-8°C

FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES

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Additional info

The monoclonal antibody MEC14.7 recognizes mouse CD34, a single-pass type I membrane glycoprotein present on small vessel endothelial cells and hematopoietic progenitor cells. The apparent molecular mass of CD34 is heterogeneous, depending on the glycosylation state in different cell types. In cultured endothelioma cell lysate, CD34 has a molecular weight of ~100 kDa, whereas in lung lysates it is ~80 kDa. 2 Isoforms of CD34 exist, both are expressed on the cell surface. CD34 is an adhesion molecule performing a role in early hematopoiesis by mediating the attachment of stem cells to the bone marrow extracellular matrix or directly to stromal cells. CD34 acts as a scaffold for the attachment of lineage specific glycans, allowing stem cells to bind to lectins expressed by stromal cells or other marrow components. CD34 presents carbohydrate ligands to selectins. CD34 is widely used as a marker to select early hematopoietic stem and progenitor cells in experimental and clinical hematopoiesis. The monoclonal antibody MEC14.7 recognizes a neuraminidase sensitive epitope on endothelium in vivo, particularly on small vessels and neoformed capillaries and developing vascular structures in embryonal structures. The monoclonal antibody MEC14.7 can be used for identification and characterization of capillary endothelial cells. Furthermore, the antibody is useful for isolation and characterization of hematopoietic progenitor cells, particularly of myelomonocytic colony forming cells. Monoclonal antibody MEC14.7 is also useful for immunopurification and cell separation

References

1. Garlanda et al. Eur J Cell Biol 1997;73:368
2. Dong et al. Arterioscl Thromb Vac Biol 1997;17:1599
3. Solberg et al. Development 2003;130:4439
4. Almholt et al. Oncogene 2003;22:4389
5. Sho et al. Arterioscl Thromb Vac Biol 2004;24:1916

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