

#3569 Store at -20C

CD34 (ICO115) Mouse mAb



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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
IHC-P, FC-L	H	Endogenous	110	Mouse IgG1	#P28906	947

Product Usage Information

Application

Immunohistochemistry (Paraffin)
Flow Cytometry (Live)

Dilution

1:50
1:200 - 1:400

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

For a carrier free (BSA and azide free) version of this product see product #41101.

Specificity / Sensitivity

CD34 (ICO115) Mouse mAb detects endogenous levels of total CD34 protein.

Source / Purification

Monoclonal antibody is produced by immunizing BALB/c mice with blast cells of a chronic myeloid leukemia patient.

Background

CD34 is a type I transmembrane glycoprophosphoprotein expressed by hematopoietic stem/progenitor cells, vascular endothelium and some fibroblasts (1). CD34 expression has been the hallmark used to identify hematopoietic stem cells for many years. CD34+ hematopoietic stem cells expand and differentiate into all the lymphohematopoietic lineages upon cytokine or growth factor stimulation and lose CD34 expression upon differentiation. However, recent studies performed in various laboratories conflict with that convention (2). The extracellular domain of CD34 is homologous to CD43, a protein involved in cell-cell adhesion, and CD34 has been shown to function as a negative regulator of cell adhesion (3). CD34 associates with CrkL but not CrkII, is a substrate for PKC, and activation of PKC is coupled with surface expression of CD34 (1,4).

Background References

1. Felschow, D. M. et al. (2001) *Blood* 97, 3768-3775.
2. Sato, T. et al. (1999) *Blood* 94, 2548-2554.
3. Drew, E. et al. (2005) *Immunity* 22, 43-57.
4. Fackler, M. J. et al. (1992) *J. Biol. Chem.* 267, 17540-17546.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Applications Key

IHC-P: Immunohistochemistry (Paraffin) **FC-L:** Flow Cytometry (Live)

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster
X: Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

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