

Mouse/Rat CD34 Antibody

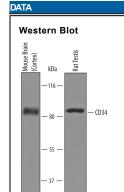
Antigen Affinity-purified Polyclonal Sheep IgG Catalog Number: AF6518

DESCRIPTION			
Species Reactivity	Mouse/Rat		
Specificity	Detects mouse and rat CD34 in direct ELISAs and Western blots. In direct ELISAs, less than 3% cross-reactivity with recombinant porci CD34 is observed.		
Source	Polyclonal Sheep IgG		
Purification	Antigen Affinity-purified		
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse CD34 Thr35-Thr287 Accession # Q64314		
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.		

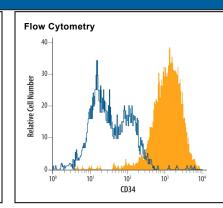
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	1 μg/mL	See Below
Flow Cytometry	2.5 µg/10 ⁶ cells	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	



Detection of Mouse and Rat CD34 by Western Blot.
Western blot shows lysates of mouse brain (cortex) tissue and rat
testis tissue. PVDF Membrane was probed with 1 µg/mL of
Mouse CD34 Antigen Affinity-purified Polydonal Antibody
(Catalog # AF6518) followed by HRP-conjugated Anti-Sheep IgG
Secondary Antibody (Catalog # HAF016). A specific band was
detected for CD34 at approximately 85-90 kDa (as indicated).
This experiment was conducted under reducing conditions and
using Immunoblot Buffer Group 8.



Detection of CD34 in bEnd.3
Mouse Cell Line by Flow
Cytometry. bEnd.3 mouse
endothelioma cell line was stained
with Mouse CD34 Antigen Affinitypurified Polyclonal Antibody
(Catalog # AF6518, filled histogram)
or control antibody (Catalog # 5-001A, open histogram), followed by
NorthernLights ™ 637-conjugated
Anti-Sheep IgG Secondary Antibody
(Catalog # NL011).

PREPARATION AND STORAGE

Reconstitution Sterile PBS to a final concentration of 0.2 mg/mL.

Shipping The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Mouse and rat CD34 is a 80 -100 kDa member of the CD34/podocalyxin family of molecules. It is a sialomucin type glycoprotein, and presents carbohydrate to selectins during cell migration. CD34 is found on mast cells, eosinophils, vascular endothelial cells, CD34⁺ stem cells and renal mesangial cells. Mature mouse CD34 is a 348 amino acid (aa) type I transmembrane protein (aa 35-382). It contains a 253 aa extracellular region (aa 35-287), and a 74 aa cytoplasmic domain that undergoes Tyr phosphorylation. Mouse and rat CD34 also is likely to undergo membrane cleavage that will generate a 54 kDa soluble form. Over aa 35-287, mouse CD34 shares 57% and 82% aa identity with human and rat Cd34, respectively.

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