

DESCRIPTION	
Species Reactivity	Mouse
Specificity	Detects mouse CD34 in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human, rat, or porcine CD34 is observed.
Source	Monoclonal Rat IgG _{2A} Clone # 700011
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse CD34 Thr35-Thr287 Accession # Q64314
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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
Flow Cytometry	0.25-1 µg/10 ⁶ cells	bEnd.3 mouse endothelioma cell line

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. <ul style="list-style-type: none"> 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

CD34 is a 100-105 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. There is one 90 kDa splice variant that shows a four aa substitution for aa 322-382. Mouse 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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