

DESCRIPTION	
<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse CD34 in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human, rat, or porcine CD34 is observed.
<b>Source</b>	Monoclonal Rat IgG <sub>2A</sub> Clone # 700011
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant mouse CD34 Thr35-Thr287 Accession # Q64314
<b>Conjugate</b>	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
<b>Formulation</b>	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
<b>Flow Cytometry</b>	0.25-1 µg/10 <sup>6</sup> cells	bEnd.3 mouse endothelioma cell line

## PREPARATION AND STORAGE

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

## 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<sup>+</sup> 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.

## PRODUCT SPECIFIC NOTICES

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