### DESCRIPTION

**Species Reactivity** Rat  
**Specificity** Detects rat CD34 in direct ELISAs and Western blots. In these formats, less than 1% cross-reactivity with recombinant porcine CD34 is observed.  
**Source** Polyclonal Goat IgG  
**Purification** Antigen Affinity-purified  
**Immunogen** Mouse myeloma cell line NS0-derived recombinant rat CD34  
**Accession #** NP_001100672  
**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.

<table>
<thead>
<tr>
<th>Sample</th>
<th>Recommended Concentration</th>
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<tbody>
<tr>
<td>Recombinant Rat CD34</td>
<td>0.1 μg/mL</td>
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<tr>
<td>Immunohistochemistry</td>
<td>5-15 μg/mL</td>
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</tbody>
</table>

### DATA

**Immunohistochemistry**  
CD34 in Rat Liver. CD34 was detected in perfusion fixed frozen sections of rat liver using 15 μg/mL Rat CD34 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4117) overnight at 4 °C. Tissue was stained with the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). View our protocol for Chromogenic IHC Staining of Frozen Tissue Sections.

### PREPARATION AND STORAGE

**Reconstitution** Reconstitute at 0.2 mg/mL in sterile PBS.  
**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.

**Stability & Storage** Use a manual defrost freezer and avoid repeated freeze-thaw cycles.  
- 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

Rat CD34 is a 80-100 kDa type I transmembrane glycoprotein that belongs to the CD34/Podocalyxin family of sialomucins. It is a widely used marker of activated hematopoietic stem/progenitor cells and is also expressed on adult vascular endothelial cells. Mature rat CD34 is predicted to be a 352 amino acid (aa) protein with a 257 aa extracellular domain (ECD) (aa 35-291) and 74 aa cytoplasmic tail (aa 313-386). Over the region used as immunogen, rat CD34 shares 83% and 57% aa identity with mouse and human CD34, respectively.