

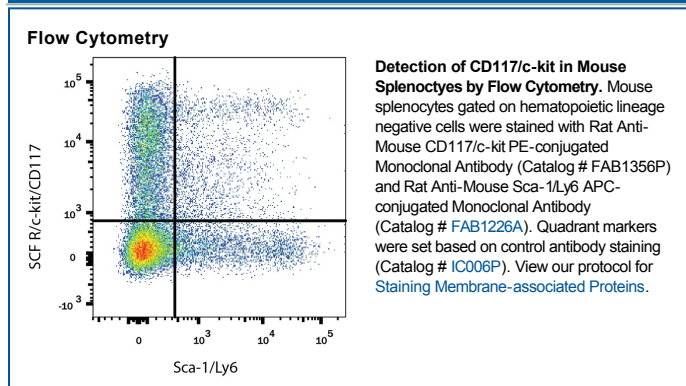
DESCRIPTION	
<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse SCF R in direct ELISAs.
<b>Source</b>	Monoclonal Rat IgG <sub>2A</sub> Clone # 180627
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant mouse SCF R Gln25-Thr519 (Ala207Glu) Accession # P05532
<b>Conjugate</b>	Phycoerythrin Excitation Wavelength: 488 nm Emission Wavelength: 565-605 nm
<b>Formulation</b>	Supplied 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>	10 $\mu$ L/10 <sup>6</sup> cells	See Below

## DATA



## 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

SCF R, also known as c-kit proto-oncogene protein and CD117, is a 145-160 kDa member of the type III tyrosine kinase family of proteins (1,2). It is expressed on hematopoietic and endothelial cell progenitors, mast cells, germ cells, melanocytes, trigeminal neurons, glial cells, placenta, kidney, lung, and gut. SCF R is a type I transmembrane glycoprotein that undergoes splicing during spermatogenesis. Two isoforms of 50 kDa and 30 kDa are generated that represent C-terminal intracellular functional products (3). SCF R also undergoes cleavage by select cell types, generating a 95-100 kDa soluble form (4). Over amino acids 25-519, mouse SCF R shares 73% and 87% amino acid sequence identity with human and rat SCF R, respectively.

### References:

1. Heldin, C-H. and J. Lennartsson (2013) Cold Spring Harb. Perspect. Biol. **5**:a009100.
2. Lennartsson, J. and L. Ronnstrand (2012) Physiol. Rev. **92**:1619.
3. Zhang, L. *et al.* (2013) BMC Dev. Biol. **13**:38.
4. Broudy, V.C. *et al.* (2001) Cytokine **15**:188.