

## PE/Cyanine7 anti-mouse CD117 (c-kit) Antibody

<b>Catalog# / Size</b>	161611 / 25 µg 161612 / 100 µg
<b>Clone</b>	S18020H
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	SCO1, SOW3, CD117, Tr-kitm, Gsfsc05, c-kit
<b>Isotype</b>	Rat IgG2a, κ
<b>Description</b>	CD117 is a 145 kD immunoglobulin superfamily member also known as c-kit and stem cell factor receptor (SCFR). It is a transmembrane tyrosine-kinase receptor that binds the c-kit ligand (also known as steel factor, stem cell factor, and mast cell growth factor). CD117 is expressed on hematopoietic stem cells (including multipotent hematopoietic stem cells, progenitors committed to myeloid and/or erythroid lineages, and T and B cell precursors), mast cells, and acute myeloid leukemia (AML) cells. CD117 interaction with its ligand is critical for the development of hematopoietic stem cells.

### Product Details

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<b>Verified Reactivity</b>	Mouse
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Rat
<b>Immunogen</b>	Mouse c-kit transfectants
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
<b>Preparation</b>	The antibody was purified by affinity chromatography and conjugated with PE/Cyanine7 under optimal conditions.
<b>Concentration</b>	0.2 mg/mL
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <b>Do not freeze.</b>
<b>Application</b>	<a href="#">FC - Quality tested</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a> . For flow cytometric staining, the suggested use of this reagent is ≤ 0.25 µg per million cells in 100 µL volume. It is recommended that the reagent be titrated for optimal performance for each application.
<b>Excitation Laser</b>	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
<b>Application Notes</b>	S18020H has been tested to block the ligand binding of SCF on c-kit which is determined by the phosphorylation of ERK1/2 in c-kit signaling.
<b>RRID</b>	AB_3698923 (BioLegend Cat. No. 161611) AB_3698923 (BioLegend Cat. No. 161612)

### Antigen Details

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<b>Structure</b>	A 145 kD immunoglobulin superfamily member
<b>Distribution</b>	Hematopoietic stem cells, mast cells, and some acute myeloid leukemia cells

**Function** The development of hepatopoietic stem cells

**Ligand/Receptor** Steel factor, stem cell factor, and mast cell growth factor

**Antigen References**

1. Barclay A, *et al.* 1997. *The Leukocyte Antigen FactsBook Academic Press.*
2. Galli SJ, *et al.* 1994. *Adv. Immunol.* 55:1.
3. Ikuta K, *et al.* 1992. *Annu. Rev. Immunol.* 10:759.
4. Besmer P, *et al.* 1986. *Nature.* 320:415.
5. Witte ON. 1990. *Cell.* 63:5.

**Gene ID** [16590](#)

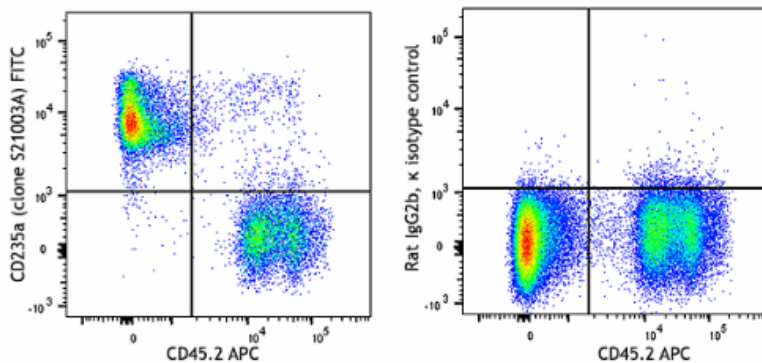
**Related Protocols**

- [Cell Surface Flow Cytometry Staining Protocol](#)

**Other Formats**

Purified anti-mouse CD117 (c-kit), FITC anti-mouse CD117 (c-kit), PE anti-mouse CD117 (c-kit), APC anti-mouse CD117 (c-kit), APC/Fire™ 750 anti-mouse CD117 (c-kit) Antibody, PE/Cyanine7 anti-mouse CD117 (c-kit) Antibody

**Product Data**



C57BL/6 mouse bone marrow cells were stained with anti-mouse CD11b (clone M1/70) FITC and anti- mouse CD117 (c-kit) (clone S18020H) PE/Cyanine7 (left) or rat IgG2a, κ PE/Cyanine7 isotype control (right). Data shown were gated on total cells.

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8999 BioLegend Way, San Diego, CA 92121 [www.biolegend.com](http://www.biolegend.com)  
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587