

APC/Fire™ 750 anti-mouse CD117 (c-kit) Antibody

Catalog# / Size	161609 / 25 µg 161610 / 100 µg
Clone	S18020H
Regulatory Status	RUO
Other Names	SCO1, SOW3, CD117, Tr-kitm, Gsfsc05, c-kit
Isotype	Rat IgG2a, κ
Description	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

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	Mouse c-kit transfectants
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide
Preparation	The antibody was purified by affinity chromatography and conjugated with APC/Fire™ 750 under optimal conditions.
Concentration	0.2 mg/mL
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	FC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis . For flow cytometric staining, the suggested use of this reagent is ≤ 1.0 µg per million cells in 100 µL volume. It is recommended that the reagent be titrated for optimal performance for each application. * APC/Fire™ 750 has a maximum excitation of 650 nm and a maximum emission of 774 nm.
Excitation Laser	Red Laser (633 nm)
Application Notes	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.
RRID	AB_3698922 (BioLegend Cat. No. 161609) AB_3698922 (BioLegend Cat. No. 161610)

Antigen Details

Structure	A 145 kD immunoglobulin superfamily member
Distribution	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](#)

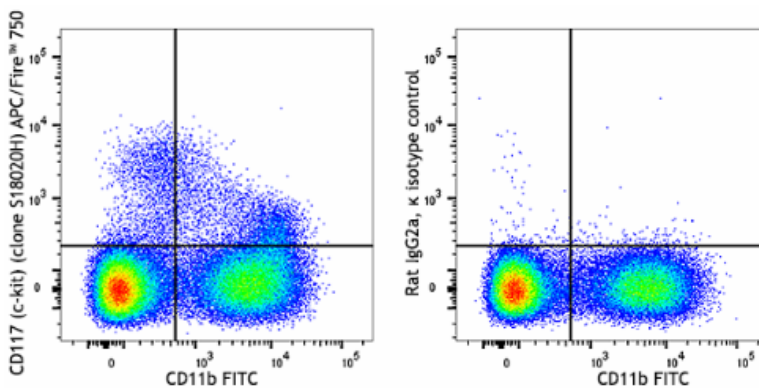
Related Protocols

- [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) APC/Fire™ 750 (left) or rat IgG2a, κ APC/Fire™ 750 isotype control (right). Data shown were gated on total cells.

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