Purified anti-human CD117 (c-kit) Antibody

Catalog# / Size	375202 / 100 µg
Clone	S18022G
Regulatory Status	RUO
Other Names	Stem cell factor receptor, c-kit, mast cell growth factor receptor, steel factor receptor
Isotype	Mouse IgG2a, κ
Description	CD117 is a 145 kD protein tyrosine kinase also known as c-kit. It is a receptor for stem cell factor or c-kit ligand. CD117 is expressed on pluripotent hematopoietic progenitor cells (approximately 1-4% bone marrow cells), mast cells, and acute myeloid leukemia cells (AML). CD117 binding of c-kit ligand induces phosphorylation of CD117 and stimulates proliferation and survival of primitive hematopoietic stem cells as well as erythroid-committed and granulo-monocytic committed cells.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Human CD117 transfectant
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide
Preparation	The antibody was purified by affinity chromatography.
Concentration	0.5 mg/mL
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C.
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 ≤ 0.5 µg per million cells in 100 µL volume. It is recommended that the reagent be titrated for optimal performance for each application.
Application Notes	Clone S18022G antibody can completely block the binding of clone 104D2 to the target, but it does not block the binding of clone w18195C to the target. Clone S18022G antibody binding to the target is not affected after cells are fixed by 4% PFA.
RRID	AB_2890807 (BioLegend Cat. No. 375202)

Antigen Details

Structure	Growth factor receptor with tyrosine kinase activity, subclass III, approximately 145 kD
Distribution	Pluripotent hematopoietic progenitor cells (approximately 1-4% bone marrow cells), mast cells, acute myeloid leukemic cells (AML)
Function	Receptor for stem cell factor. Induces proliferation and survival of primitive hematopoietic progenitors. Potent inducer of proliferation in erythroid-committed progenitor cells. Defects in CD117 have been linked to severe anemia and a decreased number of hematopoietic progenitor cells.
Ligand/Receptor	Stem cell factor (c-kit ligand)
Antigen References	1. Giebel LB, *et al.* 1992. *Oncogene* 7:2207.

2. Furitsu T, *et al.* 1993. *J. Clin. Invest.* 92:1736.

Gene ID 3815

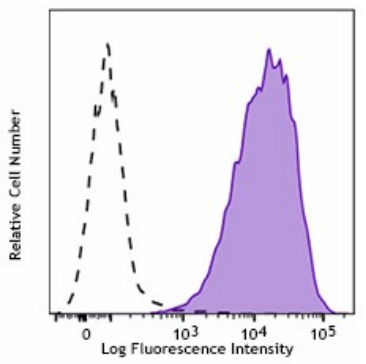
Related Protocols

Cell Surface Flow Cytometry Staining Protocol

Other Formats

Pacific Blue™ anti-human CD117 (c-kit) Antibody, PE/Cyanine7 anti-human CD117 (c-kit) Antibody, APC anti-human CD117 (c-kit), Purified anti-human CD117 (c-kit) Antibody, PE anti-human CD117 (c-kit) Antibody

Product Data



Kasumi-3 cells (an acute myeloblastic leukemia cell line) were stained with purified anti-human CD117 (c-kit) (clone S18022G) (closed histogram) or purified mouse IgG2a, κ isotype control (open histogram), followed by goat anti-mouse IgG PE.

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