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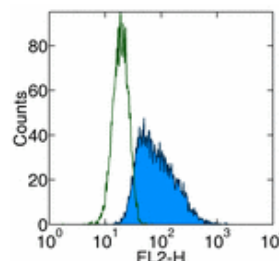E-mail: info@ebioscience.com

Product Information

Contents: Affinity Purified anti-human CD117 (c-Kit, cKit)
Catalog Number: 14-1179
Sizes: 25 ug, 100 ug
Formulation: Phosphate buffer pH 7.2,
150 mM NaCl, 0.09% NaN$_3$
Storage Conditions: Store at 4°C.
Avoid repeated freeze/thaw cycles.
Clone: YB5.B8
Isotype: Mouse IgG1, κ
HLDA No.: V C009

Surface staining of TF-1 cells with anti-human CD117 (YB5.B8) PE. Autofluorescence is indicated by open histogram. Total viable cells were used for analysis.

Available Formats of This Product				
Cat. No.	Format	Excite (nm)	Emit (nm)	Reported Applications
12-1179	PE anti-human CD117 (c-Kit, cKit)	488	575	FC
13-1179	Biotin anti-human CD117 (c-Kit, cKit)	N/A	N/A	FC
14-1179	Affinity Purified anti-human CD117 (c-Kit, cKit)	N/A	N/A	FC IH/F IP

Description

The YB5.B8 monoclonal antibody reacts with human CD117, also known as c-Kit , Steel factor receptor and stem cell factor receptor. A member of the tyrosine kinase receptor family, this 145 kDa molecule is expressed by hematopoietic progenitor cell subsets and mast cells. The interaction of c-Kit and Steel factor promotes proliferation and differentiation of hematopoietic progenitor cells and mast cell differentiation. CD117 is also expressed by melanocytes and plays a role in signaling and activation of these cells.

Usage

For research use only, not for diagnostic or therapeutic use. YB5.B8 has been reported for use in flow cytometric analysis, immunoprecipitation, and immunohistochemical staining of frozen tissue sections.

Applications Tested

The YB5.B8 antibody has been tested by flow cytometric analysis of the TF-1 cell line, a human erythroleukemia cell line. This can be used at less than or equal to 1 μg per million cells in a 100 μl total staining volume. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Related Products

Cat. 12-1179   PE anti-human CD117 (c-Kit, cKit) (clone YB5.B8)
Cat. 13-1179   Biotin anti-human CD117 (c-Kit, cKit) (clone YB5.B8)
Cat. 11-4011   FITC Anti-Mouse IgG
Cat. 13-4013   Biotin Anti-Mouse IgG (clone Polyclonal)
Cat. 11-4317   Streptavidin-FITC (Fluorescein isothiocyanate)
Cat. 12-4317   Streptavidin-PE (Phycoerythrin)
Cat. 17-4317   Streptavidin Allophycocyanin (SA-APC)
Cat. 14-4714   Affinity Purified Mouse IgG1, K Isotype Control

References

Schlossman, S., L. Bloumsell, et al. eds. (1995). Leucocyte Typing V: White Cell Differentiation Antigens. Oxford University Press. New York.

Lerner NB, Nocka KH, Cole SR, Qiu FH, Strife A, Ashman LK, Besmer P. Monoclonal antibody YB5.B8 identifies the human c-kit protein product. Blood 1991 May 1;77(9):1876-83

Okayama Y, Hunt TC, Kassel O, Ashman LK, Church MK. Assessment of the anti-c-kit monoclonal antibody YB5.B8 in affinity magnetic enrichment of human lung mast cells.
J Immunol Methods 1994 Mar 10;169(2):153-61

Ashman LK, Buhring HJ, Aylett GW, Broudy VC, Muller C. Epitope mapping and functional studies with three monoclonal antibodies to the c-kit receptor tyrosine kinase, YB5.B8, 17F11, and SR-1. J Cell Physiol 1994 Mar;158(3):545-54