

# Anti-Human CD117 (c-Kit) Purified

Catalog Number: 14-1179

Also Known As:cKit. Mast/Stem Cell Growth Factor Receptor

RUO: For Research Use Only. Not for use in diagnostic procedures.

#### **Product Information**

Contents: Anti-Human CD117 (c-Kit) Purified

**REF Catalog Number: 14-1179** 

Clone: YB5.B8

Concentration: 0.5 mg/ml Host/Isotype: Mouse IgG1, kappa

HLDA Workshop: V C009

Formulation: aqueous buffer, 0.09% sodium azide, may

contain carrier protein/stabilizer

Temperature Limitation: Store at 2-8°C.

Batch Code: Refer to Vial

☐ Use By: Refer to Vial

Caution, contains Azide

# 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.

# **Applications Reported**

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  $\mu$ g per test. A test is defined as the amount ( $\mu$ g) of antibody that will stain a cell sample in a final volume of 100  $\mu$ L. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

### 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

## **Related Products**

11-4011 Anti-Mouse IgG FITC

11-4317 Streptavidin FITC

12-4317 Streptavidin PE

13-4013 Anti-Mouse IgG Biotin (Polyclonal)

14-4714 Mouse IgG1 K Isotype Control Purified (P3.6.2.1)

17-4317 Streptavidin APC