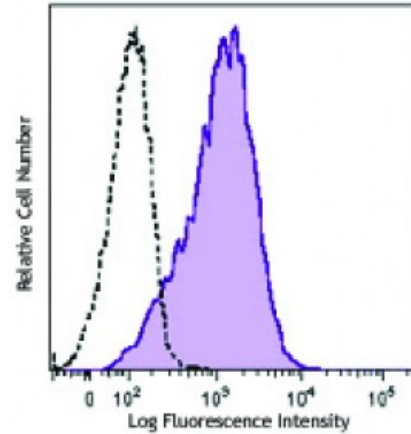


**Brilliant Violet 650™ anti-human CD117 (c-kit)**

**Catalog # / Size:** 2166105 / 25 tests  
**Clone:** 104D2  
**Isotype:** Mouse IgG1, κ  
**Immunogen:** MOLM-1 megakaryocytic cell line  
**Reactivity:** Human  
**Preparation:** The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 650™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 650™ and unconjugated antibody.  
**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).  
**Concentration:** Lot-specific



Human erythroleukemia cell line (HEL) was stained with CD117 (clone 104D2) Brilliant Violet 650™ (filled histogram) or mouse IgG1, κ Brilliant Violet 650™ isotype control (open histogram).

**Applications:**

**Applications:** Flow Cytometry  
**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 ≤5 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

Brilliant Violet 650™ excites at 405 nm and emits at 645 nm. The bandpass filter 660/20 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. **Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel.** Refer to your instrument manual or manufacturer for support. Brilliant Violet 650™ is a trademark of Sirigen Group Ltd.

This product is subject to proprietary rights of Sirigen Inc. and is made and sold under license from Sirigen Inc. The purchase of this product conveys to the buyer a non-transferable right to use the purchased product for research purposes only. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.

**Application Notes:** The 104D2 antibody does not block binding of c-Kit ligand. Additional reported applications (for the relevant formats) include: immunoprecipitation<sup>1</sup> and immunofluorescence microscopy<sup>1</sup>.

**Application References:**  
 1. Broudy VC, *et al.* 1999. *Blood* 94:1979. (IF, IP)  
 2. Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)  
 3. Nagano M, *et al.* 2007. *Blood* 110:151. (FC) [PubMed](#)

**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.

- Antigen**
- References:**
1. Giebel LB, *et al.* 1992. *Oncogene* 7:2207.
  2. Furitsu T, *et al.* 1993. *J. Clin. Invest.* 92:1736.