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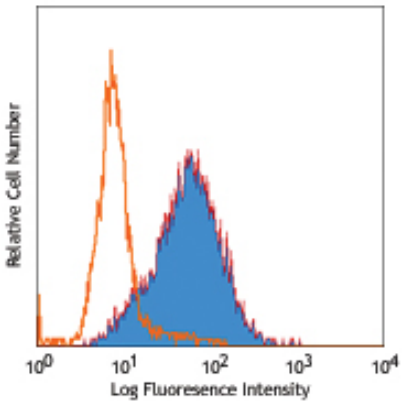
Product Data Sheet

Biotin anti-human CD117 (c-kit)

Catalog # / Size: 313208 / 100 µg
Clone: 104D2
Isotype: Mouse IgG1, κ
Immunogen: MOLM-1 megakaryocytic cell line
Reactivity: Human, **Cross-Reactivity:** Cynomolgus, Cattle (Bovine, Cow)
Preparation: The antibody was purified by affinity chromatography, and conjugated with biotin under optimal conditions. The solution is free of unconjugated biotin.
Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Concentration: 0.5 mg/ml
Storage: The antibody solution should be stored undiluted at 4°C. **Do not freeze.**



Human erythroleukemic cell line TF-1 stained with biotinylated 104D2, followed by Sav-PE

Applications:

Applications: FC - *Quality tested*
Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is ≤2.0 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.
Application Notes: The 104D2 antibody does not block binding of c-Kit ligand. Additional reported applications (for the relevant formats) include: immunoprecipitation[1] and immunofluorescence microscopy[1].

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.

Related Products:

Product	Clone	Application
Biotin Mouse IgG1, κ Isotype Ctrl	MOPC-21	FC, ICFC
APC Streptavidin		FC, ICFC
PE Streptavidin		FC, ICFC
Cell Staining Buffer		FC, ICC, ICFC
Human TruStain FcX™ (Fc Receptor Blocking Solution)		FC, ICC, ICFC

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