SONY

Product Data Sheet

APC anti-human CD117 (c-kit)

Catalog # / Size: 2166030 / 100 tests
2166025 / 25 tests

Clone: 104D2

Isotype: Mouse IgG1, κ

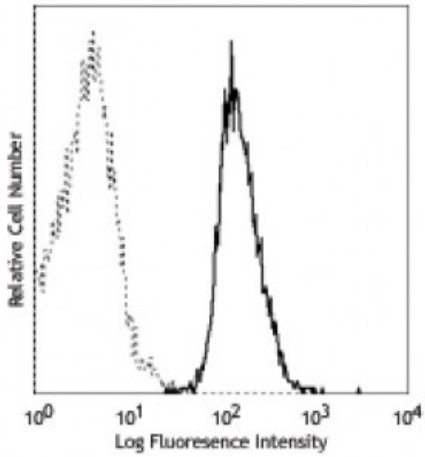
Immunogen: MOLM-1 megakaryocytic cell line

Reactivity: Human

Preparation: The antibody was purified by affinity chromatography, and conjugated with APC under optimal conditions. The solution is free of unconjugated APC and unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

Concentration: Lot-specific



Human erythroleukemia cell line TF-1 stained with 104D2 APC

Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. **Test size products are transitioning from 20 microL to 5 microL per test**. Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 microL staining volume or per 100 microL of whole blood. 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: immunoprecipitation1 and immunofluorescence microscopy1.

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
4. Luni C, *et al.* 2011. *Biotechnol Prog.* 27:1154. PubMed
5. Sputova K, *et al.* 2013. *Genome Integr.* 29:4. PubMed
6. Mandl M, *et al.* 2014. *PLoS One.* 9:112140. 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.

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