

PE/iFluor™ 647 Anti-human CD117 Antibody
104D2Catalog number: 111701Q0, 111701Q1, 111701Q2
Unit size: 25 tests, 100 tests, 500 tests**Product Details**

Storage Conditions	2-8°C with minimized light exposure. Do not freeze.
Expiration Date	12 months upon receiving
Concentration	0.1 mg/mL
Formulation	Phosphate-buffered saline (PBS, pH 7.2), 0.09% sodium azide, 0.2% (w/v) BSA

Antibody Properties

Species Reactivity	Human
Class	Primary
Clonality	Monoclonal
Host	Mouse
Isotype	Mouse IgG1
Immunogen	CD117 (c-kit, SCFR)
Clone	104D2
Conjugate	PE/iFluor™ 647

Biological Properties

Preparation	Antibody purified by affinity chromatography and then conjugated with PE/iFluor™ 647 under optimal conditions
Application	Flow Cytometry (FACS)

Spectral Properties

Conjugate	PE/iFluor™ 647
Excitation Wavelength	569 nm
Emission Wavelength	666 nm

Applications

The 104D2 monoclonal antibody reacts with human CD117, a 145 kD single-pass type i membrane protein typically found on the surface of leukemias, embryonic stem cells, mesenchymal stem cells and mast cells. CD117 has been closely linked to vital biological processes like germ cell migration, specifically ectopic germ cell programmed cell death. In addition, in some organisms, it acts to positively regulate pseudopodium assembly, plays a role in the upregulation of long-term neuronal synaptic plasticity and is an inhibitor of programmed cell death. CD117 is a component of critical cellular pathways, for example, the transmembrane receptor protein tyrosine kinase signaling pathway, Kit signaling

pathway and Fc receptor signaling pathway. From a research standpoint, it is of biological interest due to its association with vital macromolecules/ligands such as MGF, SCF and KL. CD117 is a moderately popular antibody target, with over 11000 publications in the last decade. CD117 has been widely used in stem cells and immunology research, frequently serving as a phenotypic marker for differentiating cell types in flow cytometric applications. This antibody was purified through affinity chromatography and conjugated to PE/iFluor™ 647 (ex/em = 569/666 nm). It is compatible with the 561 nm laser and 670/30 nm bandpass filter (for example, as in the BD LSRFortessa™ X-20).