

**iFluor™ 700 Anti-human CD117 Antibody  
\*104D2\***Catalog number: 111700J0, 111700J1  
Unit size: 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          | iFluor™ 700         |

**Biological Properties**

|             |                                                                                                            |
|-------------|------------------------------------------------------------------------------------------------------------|
| Appearance  | Blue liquid                                                                                                |
| Preparation | Antibody purified by affinity chromatography and then conjugated with iFluor™ 700 under optimal conditions |
| Application | Flow Cytometry (FACS), Fluorescence Imaging                                                                |

**Spectral Properties**

|                       |             |
|-----------------------|-------------|
| Conjugate             | iFluor™ 700 |
| Excitation Wavelength | 690 nm      |
| Emission Wavelength   | 713 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 iFluor™ 700 (ex/em = 690/713 nm).