

**PE/iFluor™ 700 Anti-human CD40 Antibody**  
**\*HI40a\***Catalog number: 104001X0, 104001X1, 104001X2  
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 IgG2b          |
| Immunogen          | CD40 (BP50, TNFRSF5) |
| Clone              | HI40a                |
| Conjugate          | PE/iFluor™ 700       |

**Biological Properties**

|             |                                                                                                               |
|-------------|---------------------------------------------------------------------------------------------------------------|
| Preparation | Antibody purified by affinity chromatography and then conjugated with PE/iFluor™ 700 under optimal conditions |
| Application | Flow Cytometry (FACS)                                                                                         |

**Spectral Properties**

|                       |                |
|-----------------------|----------------|
| Conjugate             | PE/iFluor™ 700 |
| Excitation Wavelength | 566 nm         |
| Emission Wavelength   | 708 nm         |

**Applications**

HI40a is an anti-human monoclonal antibody that targets the CD40 antigen. CD40 (alternatively called TNFRSF5) is a 48 kD transmembrane protein that is found on the surface of cells such as dendritic cells and epithelial cells. CD40 is a member of important cellular pathways, for instance, the tumor necrosis factor-mediated signaling pathway, immune response-regulating cell surface receptor signaling pathway and CD40 signaling pathway. Also, in many organisms, it upregulates GTPase activity, is a promoter of protein kinase C signaling and promotes transcription by RNA polymerase II. From a research standpoint, it is of biological interest due to its association with key

macromolecules/ligands like TRAP and CD154. CD40 is a very popular antibody target, with over 30000 publications in the last decade. CD40 is commonly used in flow cytometry applications as a phenotypic marker for differentiation of cell types, specifically in the study of cell biology and neuroscience. This antibody was purified through affinity chromatography and conjugated to PE/iFluor™ 700 (ex/em = 566/708 nm). It is compatible with the 561 nm laser and 710/50 nm bandpass filter (for example, as in the BD FACS Aria™ III).