

**iFluor™ 546 Anti-human CD40 Antibody**  
**\*HI40a\***Catalog number: 10400080, 10400081  
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 IgG2b          |
| Immunogen          | CD40 (BP50, TNFRSF5) |
| Clone              | HI40a                |
| Conjugate          | iFluor™ 546          |

**Biological Properties**

|             |                                                                                                            |
|-------------|------------------------------------------------------------------------------------------------------------|
| Appearance  | Red liquid                                                                                                 |
| Preparation | Antibody purified by affinity chromatography and then conjugated with iFluor™ 546 under optimal conditions |
| Application | Flow Cytometry (FACS), Fluorescence Imaging                                                                |

**Spectral Properties**

|                       |             |
|-----------------------|-------------|
| Conjugate             | iFluor™ 546 |
| Excitation Wavelength | 541 nm      |
| Emission Wavelength   | 557 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 iFluor™ 546 (ex/em = 541/557 nm). It is compatible with the 532 nm laser and 575/25 nm bandpass filter (for example, as in the BD FACSymphony™ A5).