

## iFluor™ 430 Anti-human CD40 Antibody \*HI40a\*

Catalog number: 10400030, 10400031 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™ 430

**Biological Properties** 

Appearance Yellow liquid

Preparation Antibody purified by affinity chromatography and then conjugated with iFluor™ 430 under

optimal conditions

Application Flow Cytometry (FACS), Fluorescence Imaging

**Spectral Properties** 

Conjugate iFluor™ 430

Excitation Wavelength 433 nm

Emission Wavelength 498 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™ 430 (ex/em = 433/498 nm). It is compatible with the 445 nm laser and 510/80 nm bandpass filter (for example, as in the BD FACSAria™ III).