

**mFluor™ Red 700 Anti-human CD40
Antibody *HI40a***Catalog number: 104000V0, 104000V1
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	mFluor™ Red 700

Biological Properties

Appearance	Dark blue liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with mFluor™ Red 700 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging

Spectral Properties

Conjugate	mFluor™ Red 700
Excitation Wavelength	680 nm
Emission Wavelength	695 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 mFluor™ Red 700 (ex/em = 680/695 nm). It is compatible with the 642 nm laser and 702/87 nm bandpass filter (for example, as in the Luminex Amnis CellStream).