

**XFD488 Anti-human CD40 Antibody *HI40a,
XFD488 Same Structure to Alexa Fluor™
488***Catalog number: 10400150, 10400151
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	AF488

Biological Properties

Appearance	Red liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with AF488 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging

Spectral Properties

Conjugate	AF488
Excitation Wavelength	499 nm
Emission Wavelength	520 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 XFD488 (ex/em = 499/520 nm). XFD488 is manufactured by AAT Bioquest, and it has the same chemical structure of Alexa Fluor® 488 (Alexa Fluor® is the trademark of ThermoFisher). It is compatible with the 488 nm laser and 525/50 nm bandpass filter (for example, as in the Miltenyi Biotec MACSQuant Analyzer 10).