

## XFD350 Anti-human CD40 Antibody \*G28.5\*

Catalog Number: 10401140, 10401141

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	Lot specific (please consult certificate of analysis for given lot)
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 igg1, $\kappa$
Immunogen	CD40 (BP50, TNFRSF5)
Clone	G28.5
Conjugate	AF350

### Biological Properties

---

Appearance	Off-white liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with AF350 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging
Recommended Dilutions	For flow cytometry applications, the suggested concentration is at 5 $\mu$ L/million cells in 100 $\mu$ L staining buffer. For the best performance of each application, the optimal concentration of this reagent needs to be carefully determined. <i>*The suggested working dilution is provided as a guide only. It is recommended that the users titrates the product for use in their tests using proper positive and negative controls.</i>

### Spectral Properties

---

Conjugate	AF350
Excitation Wavelength	343 nm
Emission Wavelength	441 nm

## Applications

---

G28.5 is an anti-human monoclonal antibody that targets the CD40 antigen. CD40 (also known as Bp50) is a 48 kD transmembrane protein that is expressed on the surface of cells like macrophages, dendritic cells and stem cells. CD40 is a component of key cellular pathways, in particular, 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 interleukin-12 production, is a positive regulator of isotype switching to IgG isotypes and is a promoter of protein phosphorylation. From a research standpoint, it is of biological interest due to its association with vital macromolecules/ligands like CD40L, CD154 and TRAP. CD40 is a very popular antibody target, with over 30000 publications in the last decade. CD40 is often used in flow cytometry applications as a phenotypic marker for differentiation of cell types, especially in the study of neuroscience. This antibody was purified through affinity chromatography and conjugated to XFD350 (ex/em = 343/441 nm). XFD350 is manufactured by AAT Bioquest, and it has a chemical structure similar to that of Alexa Fluor® 350 (Alexa Fluor® is the trademark of Thermo Fisher). It is compatible with the 355 nm laser and 450/50 nm bandpass filter (for example, as in the BD LSRFortessa™ Cell Analyzer).