

PE/XFD700 Anti-human CD40 Antibody *G28.5*

Catalog Number: 104011Q0,
104011Q1, 104011Q2
Unit Size: 25 tests, 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, κ
Immunogen	CD40 (BP50, TNFRSF5)
Clone	G28.5
Conjugate	PE/AF700

Biological Properties

Preparation	Antibody purified by affinity chromatography and then conjugated with PE/AF700 under optimal conditions
Application	Flow Cytometry (FACS)
Recommended Dilutions	For flow cytometry applications, the suggested concentration is at 5 uL/million cells in 100 uL 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	PE/AF700
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Excitation Wavelength 565 nm

Emission Wavelength 721 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 PE/XFD700 (ex/em = 566/721 nm). XFD700 is manufactured by AAT Bioquest, and it has a chemical structure similar to that of Alexa Fluor® 700 (Alexa Fluor® is the trademark of Thermo Fisher). It is compatible with the 561 nm laser and 697/58 nm bandpass filter (for example, as in the BD FACSMelody™).