

XFD555 Anti-human CD40 Antibody *G28.5*

Catalog Number: 10401160, 10401161

Unit Size: 100 tests, 500 tests

Product Details

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|--------------------|---|
| 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

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|--------------------|----------------------|
| Species Reactivity | Human |
| Class | Primary |
| Clonality | Monoclonal |
| Host | Mouse |
| Isotype | Mouse igg1, κ |
| Immunogen | CD40 (BP50, TNFRSF5) |
| Clone | G28.5 |
| Conjugate | AF555 |

Biological Properties

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|-----------------------|---|
| Appearance | Red liquid |
| Preparation | Antibody purified by affinity chromatography and then conjugated with AF555 under optimal conditions |
| Application | Flow Cytometry (FACS), Fluorescence Imaging |
| 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

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|-----------------------|--------|
| Conjugate | AF555 |
| Excitation Wavelength | 553 nm |
| Emission Wavelength | 568 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 XFD555 (ex/em = 553/568 nm). XFD555 is manufactured by AAT Bioquest, and it has a chemical structure similar to that of Alexa Fluor® 555 (Alexa Fluor® is the trademark of Thermo Fisher). It is compatible with the 561 nm laser and 582/15 nm bandpass filter (for example, as in the BD FACSAria™ III).