

APC/XFD750 Anti-human/ non-human primates CD137 Antibody *4B4-1*

Catalog Number: 113701D0,
113701D1, 113701D2
Unit Size: 25 tests, 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, non-human primates |
| Class | Primary |
| Clonality | Monoclonal |
| Host | Mouse |
| Isotype | Mouse IgG1 kappa |
| Immunogen | CD137 (4-1BB, ILA, TNFRSF9) |
| Clone | 4B4-1 |
| Conjugate | APC/AF750 |

Biological Properties

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| Preparation | Antibody purified by affinity chromatography and then conjugated with APC/AF750 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

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| Conjugate | APC/AF750 |
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Excitation Wavelength 651 nm

Emission Wavelength 785 nm

Applications

The 4B4-1 monoclonal antibody reacts with human/ non-human primates CD137, a 30 kD member of the TNFR superfamily frequently located on the surface of T cells and follicular dendritic cells. CD137 acts in vital cellular pathways, for example, the tumor necrosis factor-mediated signaling pathway. In addition, in certain organisms, it downregulates cell population proliferation. From a research standpoint, it is of biological interest due to its association with essential macromolecules/ligands such as 4-1BB ligand. CD137 is a fairly uncommon antibody target, with a little more than 4100 publications in the last decade. Even still, CD137 is often used in flow cytometry applications as a phenotypic marker for differentiation of cell types, specifically in the study of immunology and costimulatory molecules. This antibody was purified through affinity chromatography and conjugated to APC/XFD750 (ex/em = 756/785 nm). XFD750 is manufactured by AAT Bioquest, and it has a chemical structure similar to that of Alexa Fluor® 750 (Alexa Fluor® is the trademark of Thermo Fisher).