

## XFD700 Anti-human/ non-human primates CD137 Antibody \*4B4-1\*

Catalog Number: 11370190, 11370191

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, non-human primates   |
| Class              | Primary                     |
| Clonality          | Monoclonal                  |
| Host               | Mouse                       |
| Isotype            | Mouse IgG1 kappa            |
| Immunogen          | CD137 (4-1BB, ILA, TNFRSF9) |
| Clone              | 4B4-1                       |
| Conjugate          | AF700                       |

### Biological Properties

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|                       |   |
|-----------------------|---|
| Appearance            | Dark blue liquid  |
| Preparation           | Antibody purified by affinity chromatography and then conjugated with AF700 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.<br><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 AF700

Excitation Wavelength 696 nm

Emission Wavelength 719 nm

## Applications

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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 XFD700 (ex/em = 696/719 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).