

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

Catalog Number: 113701O0,
113701O1, 113701O2
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, non-human primates
Class	Primary
Clonality	Monoclonal
Host	Mouse
Isotype	Mouse IgG1 kappa
Immunogen	CD137 (4-1BB, ILA, TNFRSF9)
Clone	4B4-1
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 user 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

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 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 710/50 nm bandpass filter (for example, as in the BD LSRLFortessa™ X-20).