

**PacBlue Anti-human/ non-human primates  
CD137 Antibody \*4B4-1\***Catalog number: 113701I0, 113701I1  
Unit size: 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      | 0.1 mg/mL                                                                   |
| 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          | PacBlue                     |

**Biological Properties**

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

**Spectral Properties**

|                       |         |
|-----------------------|---------|
| Conjugate             | PacBlue |
| Excitation Wavelength | 404 nm  |
| Emission Wavelength   | 455 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 PacBlue (ex/em = 404/455 nm). It is compatible with the 405 nm laser and 450/45 nm bandpass filter (for example, as in the Luminex Guava easyCyte).