

## Anti-Human CD137 (4-1BB) PE-Cyanine7

Catalog Number :19411-77

RUO: For Research Use Only. Not for use in diagnostic procedures.

### Product Information

**Clone:** 4B4

**Format/Conjugate:** PE-Cyanine7

**Concentration:** 5 uL (0.125 ug)/test

**Reactivity:** Human

**Laser:** Blue (488nm)

**Peak Emission:** Not Applicable

**Peak Excitation:** Not Applicable

**Filter:** Not Applicable

**Brightness (1=dim,5=brightest):** Not Applicable

**Isotype:** Mouse IgG1, kappa

**Formulation:** Phosphate-buffered aqueous solution, ≤0.09% Sodium azide, may contain carrier protein/stabilizer, pH7.2.

**Storage:** Product should be kept at 2-8°C and protected from prolonged exposure to light.

**Applications:** FC

### Description

The 4B4 monoclonal antibody reacts with human CD137 (4-1BB), a type I membrane protein and member of the TNFR family. It is expressed on NK cells, T cells, dendritic cells, and mast cells and plays a role in T cell activation and proliferation.

### Preparation & Storage

The product should be stored undiluted at 4°C and should be protected from prolonged exposure to light. Do not freeze. The monoclonal antibody was purified utilizing affinity chromatography and unreacted dye was removed from the product.

### Application Notes

The antibody has been analyzed for quality through the flow cytometric analysis of the relevant cell type. The antibody can be used at less than or equal to 5 µL per test. A test is the amount of antibody required to stain a cell sample in the final volume of 100 µL.

### References

1. Kienzle, G., von Kempis, J. (2000). CD137 (ILA/4-1BB), expressed by primary human monocytes, induces monocyte activation and apoptosis of B lymphocytes.; *International immunology*;12(1), 73-82.
2. Lin, W., Voskens, C. J., Zhang, X., Schindler, D. G., Wood, A., Burch, E., ... Wang, L. X. (2008). Fc-dependent expression of CD137 on human NK cells: insights into "agonistic" effects of anti-CD137 monoclonal antibodies.; *Blood*;112(3), 699-707.
3. Kim, K. M., Kim, H. W., Kim, J. O., Baek, K. M., Kim, J. G., Kang, C. Y. (2002). Induction of 4-1BB (CD137) expression by DNA damaging agents in human T lymphocytes.; *Immunology*;107(4), 472-479.