#### Anti-Human CD137 Antibody, Clone 4B4-1, Biotin

## **Antibodies**

Mouse monoclonal IgG1 antibody against human, monkey CD137, biotin-conjugated

Catalog #100-1354 100 μg 1 mg/mL



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## **Product Description**

This mouse monoclonal antibody (clone 4B4-1, biotin-conjugated) reacts with human and monkey CD137, a type I membrane protein and a member of the tumor necrosis factor (TNF) receptor superfamily. Following activation, it is expressed on multiple immune cells, such as natural killer (NK), T, and dendritic cells. CD137 plays a role in cytokine activation, preventing activation-induced cell death, and it also plays a role in promoting the activity of cytotoxic T cells. As an immune stimulator, CD137 can influence the tumor microenvironment by increasing the cytotoxicity of T and NK cells as well as their ability to infiltrate tumors. For these reasons, CD137 represents a strong candidate for cancer immunotherapy. CD137 deficiency in humans has been hypothesized to inhibit differentiation and function of T cells; CD137-deficient mice have been reported to have impaired T cell cytotoxicity, proliferation, and survival.

Target Antigen Name: CD137

Alternative Names: 4-1BB, CDw137, ILA, TNFRSF9

Gene ID: 3604

Species Reactivity: Human, Monkey

Host Species: Mouse
Clonality: Monoclonal
Clone: 4B4-1

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Immunogen: Fusion protein of recombinant human 4-1BB ectodomain

IgG1, kappa

Conjugate: Biotin

### Applications

Isotype:

Verified: FC Reported: ELISA

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FACS: Fluorescence-activated cell sorting; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IHC-P: Immunohistochemistry (paraffin-embedded); IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

# **Properties**

Formulation: 50 mM sodium phosphate, 100 mM potassium chloride, 150 mM sodium chloride, pH 7.5, containing 5%

glycerol, 0.2% (w/v) bovine serum albumin, and 0.04% sodium azide

**Purification:** The antibody was purified by affinity chromatography.

Stability and Storage: Product stable at 2 - 8°C when stored undiluted. Do not freeze. Stable until expiry date (EXP) on label.

Directions for Use: For flow cytometry, the suggested use of this antibody is 10 μg/mL per 5 x 10<sup>5</sup> cells in 80 μL. It is recommended

that the antibody be titrated for optimal performance for each application.

## **Antibodies**

#### Anti-Human CD137 Antibody, Clone 4B4-1, Biotin-conjugated



## **Related Products**

For a complete list of antibodies, including other conjugates, sizes, and clones, as well as related products available from STEMCELL Technologies, visit www.stemcell.com/antibodies, or contact us at techsupport@stemcell.com.

## References

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