

Anti-4-1BB [4B4-1-1] Standard Size Ab01689-3.0

This reformatted mouse antibody was made using the variable domain sequences of the original Mouse IgG1 format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Mouse IgG2b, Kappa

Clone Number: 4B4-1-1

Alternative Name(s) of Target: CD137; MGC2172; Tumor necrosis factor receptor superfamily member 9 (TNFRSF9); T cell antigen ILA; Interleukin activated receptor; 4-1BB ligand receptor CDw137; T-cell antigen 4-1BB homolog; T-cell antigen ILA.

UniProt Accession Number of Target Protein: Q07011

Published Application(s): Block, ELISA, FC, IHC

Published Species Reactivity: Human

Immunogen: The original antibody was generated by immunizing BALB/c mice with a fusion protein of human 4-1BB antigen and glutathione s transferase (GST).

Specificity: This antibody binds to the human 4-1BB, which is expressed on the surface of activated T cells.

Application Notes: The antibody has good binding affinity for Con A-activated T cells and has an immunosuppressive activity towards lymphocyte proliferation in the in vitro mixed lymphocyte reaction. The binding of antibody to surface expressed 4-1BB molecule was assessed using flow cytometry and ELISA was used to check whether the cell culture had binding affinity to 4-1BB (Kim et al., 1995). The interaction of this antibody with CD137 is reported to induce an increase in TNF- α production by monocytes. This antibody competes with mAb M121 for binding to CD137 (PMID: 10607752). This antibody also induces the production of IFN- γ in NK cells in presence of IL-15 (PMID: 20008791). This antibody can be used in blocking assays and staining methods (PMID: 14746806). Humanized versions of this antibody (Hz4B4-1) and (Hz4B4-2) showed a 1.5 fold and 7.3 fold increase in binding affinity for 4-1BB as compared to their parental mouse antibody. Additionally, H4B4 mediated antibody-dependent cellular toxicity of activated human peripheral blood T cells and CEM cells in a dose dependent manner (PMID: 11186149). Humanized version of this antibody is available on request.

Antibody First Published in: Kim et al. Immunoregulatory effects of a monoclonal antibody to human 4-1bb molecule on alloantigen-mediated immune responses. Proceedings of the Korean Society of Applied Pharmacology (1995), pg 82-82. [PMID:](#)

Note on publication: Describes the generation of the antibody.

Product Form

Size: 200 µg Purified antibody.

Purification: Protein A affinity purified

Supplied In: PBS with 0.02% Proclin 300.

Storage Recommendation: Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.

Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.