

Anti-4-1BBL [AT113-2] Bulk Size Ab01054-1.32-BT

This antibody has a D265A mutation affecting Fc receptor engagement.

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

Isotype and Format: Mouse IgG1-D265A, Fc Silenced, Kappa

Clone Number: AT113-2

Alternative Name(s) of Target: CD137L; TNFSF9; 4-1BB ligand; 41BBL; CDw137L; homolog of mouse 4-1BB-L; receptor 4-1BB ligand; tumor necrosis factor (ligand) superfamily member 9; tumor necrosis factor (ligand) superfamily, member 9; tumor necrosis factor ligand 5A; Tumor necrosis factor ligand superfamily member 9.

UniProt Accession Number of Target Protein: P41274

Published Application(s): Blocking, WB, FC

Published Species Reactivity: Mouse

Immunogen: This antibody was raised by immunising LOU rats with soluble recombinant 4-1BBL:Fc fusion protein.

Specificity: This antibody is specific for 4-1BB ligand (also known as CD137 ligand), which is a member of the TNF superfamily and is a type II membrane protein. 4-1BB ligand is a co-stimulatory molecule that is expressed on antigen presenting cells (DCs, monocytes/macrophages, B cells) and is upregulated upon activation of these cells. Both of the 4-1BB ligand and its receptor, TNFRSF9/4-1BB, are involved in the antigen presentation process and in the generation of cytotoxic T cells. In direct ELISAs, no cross-reactivity with recombinant human RELT is observed.

Application Notes: This antibody has been used in various FACS analyses, for instance, to show that CD27:CD70 and 4-1BB:4-1BBL interactions are needed for dendritic cell-driven accumulation of antitumor cytotoxic T lymphocytes following anti-CD40 mAb treatment (French et al, 2007), to examine the underlying mechanisms of the differential T cell costimulation dependence in viral infections (Welten et al, 2015), and to explore the therapeutic benefit of using combinations of syngeneic tumor vaccines that express immune modulators (Manrique-Rincón et al, 2017). This antibody has been used as a blocking antibody, together with anti-CD70, anti-CD30L and anti-OX40L antibodies, to evaluate OX40 ligand and CD70 in the promotion of CD4+ T cell responses (Kurche et al, 2010). Furthermore, this anti-4-1BBL antibody has been used alongside the anti-CD70, anti-CD27, anti-CD40 antibodies in a BCL1-bearing mouse model to evaluate the therapeutic potency of various combined immunotherapies against lymphoma

(French et al, 2007).

Antibody First Published in: French Ruth et al. Eradication of lymphoma by CD8 T cells following anti-CD40 monoclonal antibody therapy is critically dependent on CD27 costimulation. Blood. 2007 Jun 1;109(11):4810-5. [PMID:17311995](https://pubmed.ncbi.nlm.nih.gov/17311995/)

Note on publication: Describe the generation of this antibody and its subsequent use alongside with other antibodies to demonstrate that the eradication of lymphoma by CD8 T cells following anti-CD40 monoclonal antibody therapy is critically dependent on CD27 costimulation.

Product Form

Size: 500 µg Purified antibody in bulk size.

Purification: Protein A affinity purified

Supplied In: PBS only.

Storage Recommendation: Store at 4°C for up to 3 months. Note, this antibody is provided without added preservatives, it is therefore recommended this antibody be handled under sterile conditions. 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.