



CD137 (4-1BB) Ab-1 (Clone BBK-2)

Mouse Monoclonal Antibody

Cat. #DLN-10170, DLN-10171, or DLN-10169 (0.1ml, 0.5ml, or 1.0ml at 200µg/ml) (Purified Ab with BSA and Azide)

Cat. #DLN-10172 or DLN-10173 (0.1ml or 0.2ml at 1.0mg/ml) (Purified Ab without BSA and Azide)

Cat. #DLN-10167, DLN-10168, or DLN-10166 (0.1ml, 0.5ml, or 1.0ml at 200µg/ml) (Biotin-Labeled Ab with BSA and Azide)

Description: 4-1BB (also known as CD137) is an inducible receptor-like protein expressed on the cell surface of activated splenic T cells and thymocytes. It exists as both a monomer and a dimer on the surface of activated T cells. 4-1BB is structurally related to the members of NGFR/TNFR superfamily which are characterized by the presence of three-six patterns of a cysteine-rich motif in their extracellular domains. Other members of this family include low affinity NGFR, two receptors for TNF (TNFR-I & TNFR-II), CD30, CD40, OX40, Fas, and CD27. These molecules are involved in cell growth, survival, and death processes. The cytoplasmic domain of 4-1BB include two runs of acidic amino acids, a potential p56^{lck} binding site, five consecutive glycines at the C-terminus, and four potential phosphorylation sites: one tyrosine, two threonine, and one serine.

Mol. Wt. of Antigen: 30kDa

Epitope: Ectodomain

Species Reactivity: Human. Others-not known.

Clone Designation: BBK-2

Ig Isotype / Light Chain: IgG₁/ κ

Immunogen: Ectodomain of human 4-1BB recombinant protein.¹

Applications:

- Flow Cytometry
- Immunofluorescence

The optimal dilution for a specific application should be determined by the investigator.

Positive Control: Spleen, thymus, or tonsil.

Cellular Localization: Cell membrane

Supplied As: 200µg/ml of antibody purified from ascites fluid by Protein G chromatography. Prepared in 10mM PBS, pH 7.4, with 0.2% BSA and 0.09% sodium azide. Also available without BSA and azide at 1mg/ml.

Storage and Stability:

Ab with sodium azide is stable for 24 months when stored at 2-8°C. Antibody WITHOUT sodium azide is stable for 36 months when stored at below 0°C.

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Key References:

1. Garni-Wagner BA, *et. al.* Cellular Immunology, 1996, 169(1):91-8.

Limitations and Warranty:

Our products are intended FOR RESEARCH USE ONLY and are not approved for clinical diagnosis, drug use or therapeutic procedures. No products are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our data sheets and website. Our warranty is limited to the actual price paid for the product. Dianova is not liable for any property damage, personal injury, time or effort or economic loss caused by our products.

Material Safety Data:

This product is not licensed or approved for administration to humans or to animals other than the experimental animals. Standard Laboratory Practices should be followed when handling this material. The chemical, physical, and toxicological properties of this material have not been thoroughly investigated. Appropriate measures should be taken to avoid skin and eye contact, inhalation, and ingestion. The material contains 0.09% sodium azide as a preservative. Although the quantity of azide is very small, appropriate care should be taken when handling this material as indicated above. The National Institute of Occupational Safety and Health has issued a bulletin citing the potential explosion hazard due to the reaction of sodium azide with copper, lead, brass, or solder in the plumbing systems. Sodium azide forms hydrazoic acid in acidic conditions and should be discarded in a large volume of running water to avoid deposits forming in metal drainage pipes.

For Research Use Only

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Suggested References:

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