CD137 Monoclonal Antibody (BBK-2)

Catalog Number: MA5-13739

Details

- **Size**: 500 µL
- **Host/Isotype**: Mouse / IgG1, kappa
- **Class**: Monoclonal
- **Type**: Antibody
- **Clone**: BBK-2
- **Immunogen**: Ectodomain of human 4-1BB recombinant protein
- **Conjugate**: Unconjugated
- **Form**: Liquid
- **Concentration**: 0.2 mg/ml
- **Purification**: Protein G
- **Storage buffer**: PBS, pH 7.4, with 0.2% BSA
- **Contains**: 0.09% sodium azide
- **Storage Conditions**: 4° C

Species Reactivity

- **Tested species reactivity**: Human
- **Published species reactivity**: Human

Tested Applications

- **Flow Cytometry (Flow)**: Assay Dependent
- **Immunofluorescence (IF)**: Assay Dependent

Published Applications

- **Immunohistochemistry (IHC)**: See 4 publications below
- **Flow Cytometry (Flow)**: See 2 publications below
- **Blocking Assay (BLOCK)**: See 1 publications below

MA5-13739 targets CD137 in FACS and IF applications and shows reactivity with Human samples.

The MA5-13739 immunogen is ectodomain of human 4-1BB recombinant protein.

Background/Target Information

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 and 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 p56lck binding site, five consecutive glycines at the C-terminus, and four potential phosphorylation sites: one tyrosine, two threonine, and one serine.

Product Images For CD137 Monoclonal Antibody (BBK-2)

CD137 Antibody (MA5-13739) in Flow
Flow cytometry analysis of CD137 in PBMC cells stimulated with PHA for 3 days (green) compared to an isotype control (blue). Human blood was collected, combined with a hydrophilic polysaccharide, centrifuged, transferred to a conical tube and washed with PBS. 50 ul of cell solution was added to each tube at a dilution of 2x10^7 cells/ml, followed by the addition of 50 ul of isotype control and primary antibody (Product # MA5-13739) at a dilution of 1 ug/test. Cells were incubated for 30 min at 4°C and washed with a cell buffer, followed by incubation with a DyLight 488-conjugated secondary antibody for 30 min at 4°C in the dark. FACS analysis was performed using 400 ul of cell buffer.
**PubMed References For CD137 Monoclonal Antibody (BBK-2)**

### 4 Immunohistochemistry References

<table>
<thead>
<tr>
<th>Species / Dilution</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human / Not Cited</td>
<td>MA5-13739 was used in immunohistochemistry to study the role of CD137 on Hodgkin and Reed-Sternberg cells in the mechanism by which they inhibit the activation of T-cells</td>
</tr>
<tr>
<td>Human / 1:30</td>
<td>MA5-13739 was used in immunohistochemistry to study the diagnostic and therapeutic importance of CD137 expression by follicular dendritic cell tumors and Hodgkin and T-cell lymphomas</td>
</tr>
<tr>
<td>Human / 1:15</td>
<td>MA5-13739 was used in immunohistochemistry to study the expression of genes reflecting tumor and microenvironment and their value in predicting survival in diffuse large B-cell lymphoma</td>
</tr>
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### 2 Flow Cytometry References

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Human / 1 ug/ml</td>
<td>MA5-13739 was used in flow cytometry to study the role of CD137 in monocyte recruitment to inflammation</td>
</tr>
<tr>
<td>Human / Not Cited</td>
<td>MA5-13739 was used in flow cytometry to study the role of CD137 ligand in NK-cell reactivity against human acute myeloid leukemia cells</td>
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### 1 Blocking Assay References

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MA5-13739 was used in blocking or activating experiment to study the mechanisms underlying melphalan- and hyperthermia-induced apoptosis in Ewing sarcoma cells

Anticancer research (Nov 2008; 28: 2585)
"Molecular mechanisms and gene regulation of melphalan- and hyperthermia-induced apoptosis in Ewing sarcoma cells."
Author(s): Krause C, Klüttermann K, Mauz-Körholz C
PubMed Article URL: http://dx.doi.org/null