CD103 Monoclonal Antibody (LF61)

Catalog Number: MA1-33553

Details

- **Size**: 100 µg
- **Host/Isotype**: Mouse / IgG1
- **Class**: Monoclonal
- **Type**: Antibody
- **Clone**: LF61
- **Immunogen**: Hairy cell leukemia cells
- **Conjugate**: Unconjugated
- **Form**: Liquid
- **Concentration**: 1 mg/mL
- **Storage Conditions**: Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

Species Reactivity

- **Species reactivity**: Human
- **Published species**: Human, Not Applicable

Tested Applications

- **Flow Cytometry (Flow)**: Assay-dependent
- **Immunohistochemistry (Frozen)** (IHC (F)): Assay-dependent
- **Immunoprecipitation (IP)**: Assay-dependent

Published Applications

- **Flow Cytometry (Flow)**: See 3 publications below
- **Miscellaneous PubMed (Misc)**: See 1 publications below

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Suggested working dilutions are given as a guide only. It is recommended that the user titrate the product for use in their own experiment using appropriate negative and positive controls.

Product specific information

MA1-33553 detects CD103 from human samples.

Background/Target Information

CD103 (ITGAE, Integrin alpha E) is a molecule that is expressed on mucosa-associated T lymphocytes and activated cells and on subcut of TGF beta-1 cells. In particular, CD103 includes a 150kDa alpha chain and a 120kDa beta chain. CD103 is expressed by 0.5 to 2% of resting lymphocytes in peripheral blood and lymphoid organs. CD103 antibody stains a few bone marrow cells and, rarely, peripheral blood lymphocytes. CD103 is part of the integrin family which are heterodimeric integral membrane proteins composed of an alpha chain and a beta chain. ITGAE encodes an I-domain-containing alpha integrin that undergoes post-translational cleavage in the extracellular domain, yielding disulfide-linked heavy and light chains. In combination with the beta 7 integrin, CD103 protein forms the E-cadherin binding integrin known as the human mucosal lymphocyte-1 antigen. CD103 is preferentially expressed in human intestinal intraepithelial lymphocytes (IEL), and in addition to a role in adhesion, it may serve as an accessory molecule for IEL activation. Diseases associated with CD103 dysfunction include hairy cell leukemia and splenic marginal zone lymphoma.

### PubMed References For CD103 Monoclonal Antibody (LF61)

#### 3 Flow Cytometry References

<table>
<thead>
<tr>
<th>Species / Dilution</th>
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<tbody>
<tr>
<td>Not Applicable / Not Cited</td>
<td>MA1-33553 was used in flow cytometry to discuss the creation of stable T-cell lines to study their impact in inflammatory bowel disease</td>
</tr>
</tbody>
</table>
| Not Applicable / Not Cited | "Higher proliferative capacity of T lymphocytes from patients with Crohn disease than from ulcerative colitis is disclosed by use of Herpesvirus salimiri-transformed T-cell lines."
Author(s): Aguillera-Montilla N, Pérez-Blas M, Valeri AP, López-Santalla M, Rodríguez-Juan C, Mencia A, Castellano G, Manzano ML, Oasis B, Sánchez F, Martín-Villa JM
PubMed Article URL: [http://dx.doi.org/10.1080/00365520410008015](http://dx.doi.org/10.1080/00365520410008015) |
| Not Applicable / Not Cited | MA1-33553 was used in flow cytometry to study T-cell lines from gastric cancer patients and healthy volunteers |
| Not Applicable / 1:20 | "Intrinsic defects explain altered proliferative responses of T lymphocytes and HVS-derived T-cell lines in gastric adenocarcinoma."
PubMed Article URL: [http://dx.doi.org/10.1007/s00262-003-0413-8](http://dx.doi.org/10.1007/s00262-003-0413-8) |
| Not Applicable / Not Cited | MA1-33553 was used in flow cytometry to decipher how subsequent acute infection is supressed in T cell responses after exposure to subinfecitious hepatitis C virus |
| Not Applicable / Not Cited | "Subinfectious hepatitis C virus exposures suppress T cell responses against subsequent acute infection."
Author(s): Park SH, Veerapu NS, Shin EC, Biancotto A, McCoy JP, Capone S, Folgori A, Rehermann B
PubMed Article URL: [http://dx.doi.org/10.1038/nm.3408](http://dx.doi.org/10.1038/nm.3408) |
| Not Applicable / Not Cited | MA1-33553 was used in flow cytometry to test if CD103 has a regulatory role in the microenvironment of the epithelial cell layer. |
| Not Applicable / Not Cited | "Phenotypic and molecular characterization of CD103+ CD4+ T cells in bronchoalveolar lavage from patients with interstitial lung diseases."
Author(s): Braun RK, Foerster M, Graumann PR, Haefner D, Workalemahu G, Kroegel C
PubMed Article URL: [http://dx.doi.org/10.1002/cyto.b.10021](http://dx.doi.org/10.1002/cyto.b.10021) |

#### 1 Miscellaneous PubMed References

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