Product Description

The DX5 antibody reacts with murine CD49b (α2 integrin), an ~150 kDa type 1 transmembrane glycoprotein that associates non-covalently with CD29 (β1 integrin) to form the heterodimeric CD49b/CD29 complex known as VLA-2, a receptor for extracellular matrix proteins such as collagen, E-cadherin, fibronectin and laminin. CD49b is highly expressed by platelets and is found on a majority of NK cells, on NK-T cells, and on a small subset of CD8+ T cells; the latter population increases substantially following viral infection. CD49b is also expressed by several tissues, including intestine, kidney, mammary gland and lung. The DX5 antibody is particularly useful for identifying NK cells in mice lacking the NK1.1 antigen. Binding of the DX5 antibody has not been observed to affect the function of the VLA-2 integrin. DX5 binding is, however, blocked by the clone HMa2 antibody.

Target Antigen Name: CD49b
Alternative Names: α2 integrin, VLA-2α chain, Integrin α2 chain
Gene ID: 16398
Species Reactivity: Mouse
Host Species: Rat (LEW)
Clonality: Monoclonal
Clone: DX5
Isotype: IgM, kappa
Immunogen: IL-2-propagated NK1.1+ cells from C57BL/6 mice
Conjugate: Alexa Fluor® 488

Applications

Verified: FC
Reported: FC
Special Applications: This antibody clone has been verified for purity assessments of cells isolated with EasySep™ Mouse NK Cell Enrichment Kit (Catalog #19755).

Properties

Size: 25 μg
Concentration: 0.5 mg/mL
Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide
Purification: The antibody was conjugated with Alexa Fluor® 488 under optimal conditions, and is at >85% purity. The solution is free of unconjugated Alexa Fluor® 488.
Stability and Storage: Product stable at 2 - 8°C when stored undiluted. Do not freeze. Protect product from prolonged exposure to light. For product expiry date, please request a lot-specific Certificate of Analysis from techsupport@stemcell.com.
Directions for Use: For flow cytometry the suggested use of this antibody is ≤0.25 μg per 1 x 10e6 cells in 100 μl volume. It is recommended that the antibody be titrated for optimal performance for each application.

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; WB: Western blotting
Data

(A) Flow cytometry analysis of C57BL/6 mouse splenocytes labeled with Anti-Mouse CD49b Antibody, Clone DX5, Alexa Fluor® 488 and anti-mouse CD45, APC.

(B) Flow cytometry analysis of C57BL/6 mouse splenocytes labeled with a rat IgM, kappa Alexa Fluor® 488 isotype control antibody and anti-mouse CD45, APC.

Related Products

<table>
<thead>
<tr>
<th>PRODUCT NAME</th>
<th>CATALOG #</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anti-Mouse CD49b Antibody, Clone DX5</td>
<td>60020</td>
<td>Coming soon</td>
</tr>
<tr>
<td>Anti-Mouse CD49b Antibody, Clone DX5, Alexa Fluor® 488</td>
<td>60020AD</td>
<td>25 μg</td>
</tr>
<tr>
<td>Anti-Mouse CD49b Antibody, Clone DX5, PE</td>
<td>60020PE</td>
<td>200 μg</td>
</tr>
</tbody>
</table>

References


Alexa Fluor® is a registered trademark of Life Technologies Corporation. This product is licensed for internal research use only and its sale is expressly conditioned on the buyer not using it for manufacturing, performing a service, or medical test, or otherwise generating revenue. For use other than research, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad, CA 92008 USA or outlicensing@lifetech.com.