CD13 (L138)

FORMS

<table>
<thead>
<tr>
<th>Form</th>
<th>Catalog number</th>
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</tr>
</thead>
<tbody>
<tr>
<td>PE</td>
<td>340686</td>
<td>APC-R700</td>
<td>657699</td>
</tr>
<tr>
<td>PE-Cy™7</td>
<td>338432</td>
<td>BV605</td>
<td>663800</td>
</tr>
</tbody>
</table>

DESCRIPTION

Specificity

The CD13 antibody specifically binds to a glycosylated 150-kilodalton (kDa) type II integral membrane zinc-metallopeptase. The CD13 antigen is also known as aminopeptidase N, APN, ANPEP, and gp150.1

Antigen distribution

The CD13 antigen is expressed on granulocytes, monocytes, mast cells, and granulocyte/macrophage progenitor cells (CFU-GM), but not on lymphocytes, platelets, or erythrocytes.2,3 It is expressed on most acute myeloid leukemia (AML) cells and some chronic myeloid leukemia (CML) cells. The CD13 antigen is also expressed on epithelial cells of the kidney, small intestine, and respiratory tract, as well as in synaptic membranes in the central nervous system (CNS).

The CD13 antigen is involved in the metabolism of many regulatory peptides.1 Clustering of the CD13 antigen by various forms of ligation promotes the adhesion between monocytes and endothelial cells.4 The CD13 antigen is the receptor for human coronavirus 229E, the causative agent for some cases of upper respiratory infection.5

Clone

The CD13 antibody, clone L138 (also known as Leu-M7),6,7 is derived from the hybridization of Sp2/0 mouse myeloma cells with spleen cells isolated from BALB/c × C57BL/6 hybrid mice immunized with the KG-1a cell line.

Composition

The CD13 antibody is composed of mouse IgG1 heavy chains and kappa light chains.

Product configuration

The following are supplied in buffer containing a stabilizer and a preservative.

<table>
<thead>
<tr>
<th>Form</th>
<th>Number of tests</th>
<th>Volume per test (µL)a</th>
<th>Amount provided (µg)</th>
<th>Total volume (mL)</th>
<th>Concentration (µg/mL)</th>
<th>Stabilizer</th>
<th>Preservative</th>
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<tr>
<td>PE</td>
<td>100</td>
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<td>50</td>
<td>2</td>
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<td>Gelatin</td>
<td>0.1% Sodium azide</td>
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<tr>
<td>PE-Cy™7</td>
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<td>12.5</td>
<td>0.5</td>
<td>25</td>
<td>Gelatin</td>
<td>0.1% Sodium azide</td>
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<td>25</td>
<td>BSA</td>
<td>ProClim™ 300</td>
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<tr>
<td>BV605b</td>
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<td>0.5</td>
<td>100</td>
<td>BSA</td>
<td>0.09% Sodium azide</td>
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</tbody>
</table>

a. Volume required to stain 10⁶ cells.

b. BD Horizon™ APC-R700, BD Horizon Brilliant™ Violet 605

Analyte Specific Reagent. Analytical and performance characteristics are not established.

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CAUTION Some PE-Cy7 and APC-R700 conjugates show changes in their emission spectra with prolonged exposure to paraformaldehyde or light. For overnight storage of stained cells, wash and resuspend in buffer without paraformaldehyde after 1 hour of fixation.

CAUTION Prolonged exposure of cells to paraformaldehyde can lead to increased autofluorescence in the violet channels. For overnight storage of stained cells, wash and resuspend in buffer without paraformaldehyde after 1 hour of fixation.

CAUTION If you choose to combine BD Horizon Brilliant™ reagents in a multicolor staining cocktail, dyes may bind to one another without the use of a buffering solution, such as BD Horizon™ Brilliant Stain Buffer.

NOTE The technical information for the APC-R700 conjugate was generated on a BD FACSTM brand flow cytometer using a red laser and a 712/21 filter.

NOTE The technical information for the BV605 conjugate was generated on a BD FACSTM brand flow cytometer using a violet laser and a 606/36 filter.

Purity

PE, PE-Cy7, APC-R700: ≤20% free fluorophore at bottling, as measured by size-exclusion chromatography (SEC)

BV605: ≤25% free fluorophore, as measured by ion-exchange chromatography (IEC)

HANDLING AND STORAGE

Store vials at 2°C–8°C. Conjugated forms should not be frozen. Protect from exposure to light. Each reagent is stable until the expiration date shown on the bottle label when stored as directed.

WARNING All biological specimens and materials coming in contact with them are considered biohazards. Handle as if capable of transmitting infection8,9 and dispose of with proper precautions in accordance with federal, state, and local regulations. Never pipette by mouth. Wear suitable protective clothing, eyewear, and gloves.

The APC-R700 conjugate is bottled with ProClin 300, and contains 0.003% of a mixture of CMIT/MIT (3:1), CAS number 55965-84-9.

H317 May cause an allergic skin reaction.

Visit regdocs.bd.com to download the Safety Data Sheet.

CHARACTERIZATION

To ensure consistently high-quality reagents, each lot of antibody is tested for conformance with characteristics of a standard reagent.

WARRANTY

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REFERENCES


PATENTS AND TRADEMARKS

BV605 is covered by one or more of the following US patents: 8,110,673; 8,158,444; 8,227,187; 8,455,613; 8,575,303; or 8,354,239.

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