Human Leukotriene B4 R1
Fluorescein-conjugated Antibody
Monoclonal Mouse IgG1, Clone # 203/14F11
Catalog Number: FAB099F
100 Tests

**DESCRIPTION**

<table>
<thead>
<tr>
<th>Species Reactivity</th>
<th>Human</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specificity</td>
<td>Recognizes human Leukotriene B4 R1 (5).</td>
</tr>
<tr>
<td>Source</td>
<td>Monoclonal Mouse IgG1, Clone # 203/14F11</td>
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<tr>
<td>Purification</td>
<td>Protein A or G purified from hybridoma culture supernatant</td>
</tr>
<tr>
<td>Immunogen</td>
<td>HeLa cervical epithelial carcinoma cell line transfected with human Leukotriene B4 R1</td>
</tr>
<tr>
<td>Conjugate</td>
<td>Fluorescein</td>
</tr>
<tr>
<td></td>
<td>Excitation Wavelength: 488 nm</td>
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<tr>
<td></td>
<td>Emission Wavelength: 515-545 nm (FITC)</td>
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</tbody>
</table>

**Formulation**

Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details.

*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

**APPLICATIONS**

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

<table>
<thead>
<tr>
<th>Recommended Concentration</th>
<th>Sample</th>
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<tbody>
<tr>
<td>Flow Cytometry</td>
<td>10 µL/10⁶ cells</td>
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</tbody>
</table>

**DATA**

**Flow Cytometry**

Detection of Leukotriene B4 R1 in Human Blood Monocytes by Flow Cytometry. Human peripheral blood monocytes were stained with Mouse Anti-Human CD14 APC-conjugated Monoclonal Antibody (Catalog # FAB3832A) and either (A) Mouse Anti-Human Leukotriene B4 R1 Fluorescein-conjugated Monoclonal Antibody (Catalog # FAB099F) or (B) Mouse IgG1, Fluorescein Isotype Control (Catalog # IC002F). View our protocol for Staining Membrane-associated Proteins.

**PREPARATION AND STORAGE**

Shipping: The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage: Protect from light. Do not freeze.

- 12 months from date of receipt, 2 to 8 °C as supplied.
BACKGROUND
Polymorphonuclear granulocytes secrete the lipid chemotactic mediator Leukotriene B4 (LTB4) in response to inflammatory stimuli (1). Neutrophils, monocytes and lymphocytes respond to LTB4 via specific receptors localized on the cell surface (2-4). The high affinity LTB4 Receptor known as BLT1 is only expressed on leukocytes (5-7) while a second low affinity receptor BLT2 is expressed more ubiquitously (8, 9). The BLT1 and BLT2 are G-protein linked seven-transmembrane spanning receptors that share about 37-45% amino acid identity (8, 9). Enhanced LTB4 production and engagement of the BLT receptors can be important in allergic and inflammatory diseases such as asthma (10), allergic encephalomyelitis (11), endotoxic shock (12), ischemia (12), psoriasis (13), rheumatoid arthritis (14) and inflammatory bowel disease (15). In addition, it has been reported that BLT1 can function as an additional co-receptor for HIV infection of CD4+ T cells (16, 17).

Investigations into the mechanisms and potential inhibitors of LTB4 binding to its receptors may provide insight into possible treatment modalities for a number of inflammatory disorders.

References: