**DESCRIPTION**

Species Reactivity: Human

Specificity: Detects human GM-CSF in Western blots.

Source: Monoclonal Mouse IgG, Clone # 3209

Purification: Protein A or G purified from hybridoma culture supernatant

Immunogen: E. coli-derived recombinant human GM-CSF

Accession #: P04141

Endotoxin Level: <0.10 EU per 1 μg of the antibody by the LAL method.

**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.

**Recommended Concentration**

<table>
<thead>
<tr>
<th>Sample</th>
<th>Western Blot</th>
<th>1 µg/mL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immunocytochemistry</td>
<td>Recombinant Human GM-CSF (Catalog # 215-GM) under non-reducing conditions only</td>
<td></td>
</tr>
<tr>
<td>Neutralization</td>
<td>8-25 µg/mL</td>
<td>See Below</td>
</tr>
</tbody>
</table>

**DATA**

**Immunocytochemistry**

GMCSF in Human PBMCs. Granulocyte Macrophage Colony Stimulating Factor (GM-CSF) was detected in human peripheral blood mononuclear cells (PBMCs) using Human GM-CSF Monoclonal Antibody (Catalog # MAB215) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). View our protocol for Fluorescent ICC Staining of Non-adherent Cells.

**Neutralization**

Cell Proliferation Induced by GM-CSF and Neutralization by Human GM-CSF Antibody. Recombinant Human GM-CSF (Catalog # 215-GM) stimulates proliferation in the TF-1 human erythroleukemic cell line in a dose-dependent manner (orange line) as measured by Resazurin (Catalog # AR002). Proliferation elicited by Recombinant Human GM-CSF (0.1 ng/mL) is neutralized (green line) by increasing concentrations of Human GM-CSF Monoclonal Antibody (Catalog # MAB215). The ND_{50} is typically 0.075-0.45 µg/mL.

**PREPARATION AND STORAGE**

Reconstitution: Reconstitute at 0.5 mg/mL in sterile PBS.

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

Stability & Storage: Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

**BACKGROUND**

Granulocyte Macrophage Colony Stimulating Factor (GM-CSF) is a growth factor produced by a variety of lymphoid cells. It binds to receptor heterodimers consisting of a GM-CSF-specific α chain and the common β chain that is shared by the high-affinity receptors for IL-3 and IL-5.