**DESCRIPTION**

Species Reactivity
Mouse

Specificity
Detects mouse Granzyme B in ELISAs and Western blots. In sandwich immunoassays, less than 1% cross-reactivity with recombinant human (rh) rhGranzyme A, rhGranzyme B, recombinant mouse (rm) Granzyme D, rmGranzyme G, and rhGranzyme H is observed.

Source
Polyclonal Goat IgG

Purification
Antigen Affinity-purified

Immunogen
Mouse myeloma cell line NS0-derived recombinant mouse Granzyme B Lys17-Ser247
Accession # P04187

Formulation
Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

*Small pack size (SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS.

**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>Sample</th>
<th>Recommended Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recombinant Mouse Granzyme B (Catalog # 1865-SE)</td>
<td>0.1 µg/mL</td>
</tr>
<tr>
<td>See Below</td>
<td>5-15 µg/mL</td>
</tr>
<tr>
<td>Conditioned cell culture medium spiked with Recombinant Mouse Granzyme B (Catalog # 1865-SE)</td>
<td>25 µg/mL</td>
</tr>
</tbody>
</table>

**Mouse Granzyme B Sandwich Immunoassay**

<table>
<thead>
<tr>
<th>Reagent</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mouse Granzyme B Antibody (Catalog # AF1865)</td>
<td>0.2-0.8 µg/mL</td>
</tr>
<tr>
<td>Mouse Granzyme B Biotinylated Antibody (Catalog # BAF1865)</td>
<td>0.1-0.4 µg/mL</td>
</tr>
<tr>
<td>Recombinant Mouse Granzyme B (Catalog # 1865-SE)</td>
<td>0.2-0.8 µg/mL</td>
</tr>
</tbody>
</table>

**Neutralization**

Measured by its ability to neutralize Recombinant Mouse Granzyme B (0.5 µg/mL, Catalog # 1865-SE) cleavage of the fluorogenic peptide substrate Boc-AAD-SBzl (100 µM). The Neutralization Dose (ND50) is typically 3.5 µg/mL.

**DATA**

**Immunocytochemistry**

Granzyme B was detected in immersion fixed mouse splenocytes stimulated with calcium ionomycin and PMA using Goat Anti-Mouse Granzyme B Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1865) at 15 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for Fluorescent ICC Staining of Non-adherent Cells.

**PREPARATION AND STORAGE**

**Reconstitution**
Reconstitute at 0.2 mg/mL in sterile PBS.

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

*Small pack size (SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C.

**Stability & Storage**

- 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.
Granzyme B is a member of the granzyme family of the serine proteases found specifically in the cytotoxic granules of cytotoxic T lymphocytes (CTL) and natural killer (NK) cells (1, 2). Granzyme B plays an essential role in granule-mediated apoptosis and may have additional roles in rheumatoid arthritis and in bacterial and viral infections (3). It activates various caspases and cleaves proteins such as aggrecan (3). Mouse Granzyme B is synthesized as a precursor (247 residues) with a signal and a pro peptide (residues 1-20) and a mature chain (residues 21-247) (4, 5). The recombinant mouse Granzyme B consisting of residues 17 to 247 was expressed and purified. After activation with cathepsin C, it cleaves a thioester substrate.

References: