

**DESCRIPTION**

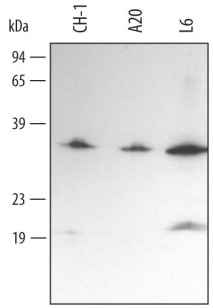
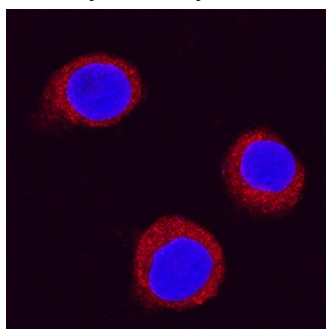
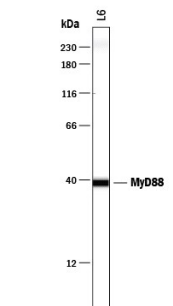

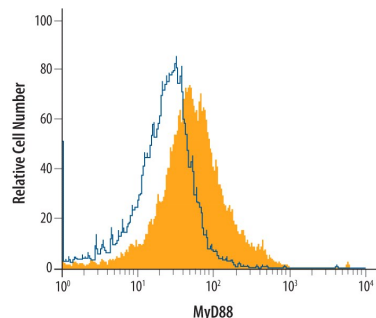
|                           |   |
|---------------------------|---|
| <b>Species Reactivity</b> | Mouse/Rat   |
| <b>Specificity</b>        | Detects mouse and rat MyD88 in Western blots.   |
| <b>Source</b>             | Polyclonal Goat IgG   |
| <b>Purification</b>       | Antigen Affinity-purified   |
| <b>Immunogen</b>          | <i>E. coli</i> -derived recombinant mouse MyD88<br>Met1-Pro296<br>Accession # Q3U7M4  |
| <b>Formulation</b>        | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.<br>*Small pack size (-SP) is supplied 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.

|   | <b>Recommended Concentration</b>   | <b>Sample</b> |
|---|--|---------------|
| <b>Western Blot</b>                             | 1 µg/mL  | See Below     |
| <b>Immunocytochemistry</b>                      | 5-15 µg/mL   | See Below     |
| <b>Intracellular Staining by Flow Cytometry</b> | 2.5 µg/10 <sup>6</sup> cells   | See Below     |
| <b>Simple Western</b>                           | 10 µg/mL   | See Below     |
| <b>CyTOF-ready</b>                              | Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation. |               |

**DATA**

|   |   |
|---|---|
| <p><b>Western Blot</b></p>  <p><b>Detection of Mouse/Rat MyD88 by Western Blot.</b> Western blot shows lysates of L6 rat myoblast cell line, A20 mouse B cell lymphoma cell line, and CH-1 mouse B cell lymphoma cell line. PVDF membrane was probed with 1 µg/mL of Goat Anti-Mouse/Rat MyD88 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3109) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band was detected for MyD88 at approximately 39 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 2.</p>                                       | <p><b>Immunocytochemistry</b></p>  <p><b>MyD88 in RAW 264.7 Mouse Cell Line.</b> MyD88 was detected in immersion fixed RAW 264.7 mouse monocyte/macrophage cell line using Goat Anti-Mouse/Rat MyD88 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3109) at 1.7 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 cytoplasmic. View our protocol for <a href="#">Fluorescent ICC Staining of Cells on Coverslips</a>.</p> |
| <p><b>Simple Western</b></p>  <p><b>Detection of Rat MyD88 by Simple Western™.</b> Simple Western lane view shows lysates of L6 rat myoblast cell line, loaded at 0.2 mg/mL. A specific band was detected for MyD88 at approximately 39 kDa (as indicated) using 10 µg/mL of Goat Anti-Mouse/Rat MyD88 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3109) followed by 1:50 dilution of HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.</p>  | <p><b>Intracellular Staining by Flow Cytometry</b></p>  <p><b>Detection of MyD88 in Mouse Splenocytes by Flow Cytometry.</b> Mouse splenocytes were stained with Goat Anti-Mouse/Rat MyD88 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3109, filled histogram) or control antibody (Catalog # AB-108-C, open histogram), followed by Allophycocyanin-conjugated Anti-Goat IgG Secondary Antibody (Catalog # F0108). To facilitate intracellular staining, cells were fixed with paraformaldehyde and permeabilized with saponin. This application has not been tested in rat samples.</p>              |

**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** 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**

Myeloid Differentiation primary response protein 88 (MyD88) is a 296 amino acid, 34 kDa, ubiquitously expressed, cytoplasmic adaptor protein involved in the signaling of TLR and IL-1 R family members. MyD88 contains an N-terminal death domain and a C-terminal Toll/IL-1 R (TIR) domain. Each domain seems to participate in protein-protein interactions, as the death domain is inactive. Upon Toll receptor ligation, MyD88 is recruited to the receptor and initiates a signaling cascade that results in NkκB and JNK activation. The amino acid sequence of mouse MyD88 is 93% identical to that of rat MyD88.