**DESCRIPTION**

**Species Reactivity**

Human

**Specificity**

Detects human TREM-2 in direct ELISAs and Western blots. In direct ELISAs, less than 50% cross-reactivity with recombinant mouse TREM-2b is observed.

**Source**

Polyclonal Goat IgG

**Purification**

Antigen Affinity-purified

**Immunogen**

Mouse myeloma cell line NS0-derived recombinant human TREM-2 His19-Ser174

Accession # Q9NZC2

**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>Application</th>
<th>Recommended Concentration</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Blot</td>
<td>0.2 μg/mL</td>
<td>See Below</td>
</tr>
<tr>
<td>Flow Cytometry</td>
<td>2.5 μg/10⁶ cells</td>
<td>Human peripheral blood monocytes</td>
</tr>
<tr>
<td>Immunocytochemistry</td>
<td>5-15 μg/mL</td>
<td>See Below</td>
</tr>
<tr>
<td>CyTOF-ready</td>
<td>Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.</td>
<td></td>
</tr>
</tbody>
</table>

**ELISA**

This antibody functions as an ELISA detection antibody when paired with Mouse Anti-Human TREM-2 Monoclonal Antibody.

This product is intended for assay development on various assay platforms requiring antibody pairs. We recommend the Human TREM-2 DuoSet ELISA Kit (Catalog # DY1828-05) for convenient development of a sandwich ELISA.

**DATA**

**Western Blot**

Detection of Human TREM-2 by Western Blot. Western blot shows lysates of THP-1 human acute monocytic leukemia cell line. PVDF membrane was probed with 0.2 μg/mL of Goat Anti-Human TREM-2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1828) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). A specific band was detected for TREM-2 at approximately 28 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

**Immunocytochemistry**

TREM-2 in Human Dendritic Cells. TREM-2 was detected in immersion fixed immature human dendritic cells using Goat Anti-Human TREM-2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1828) at 10 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 Cells on Coverslips.
**Human TREM-2 Antibody**

**Antigen Affinity-purified Polyclonal Goat IgG**

**Catalog Number:** AF1828

---

**ELISA**

**Standard Curve.** Recombinant Human TREM-2 protein was serially diluted 2-fold and captured by Mouse Anti-Human TREM-2 Monoclonal Antibody (Catalog # MAB18281) coated on a Clear Polystyrene Microplate (Catalog # DY990). Goat Anti-Human TREM-2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1828) was biotinylated and incubated with the protein captured on the plate. Detection of the standard curve was achieved by incubating Streptavidin-HRP (Catalog # DY998) followed by Substrate Solution (Catalog # DY999) and stopping the enzymatic reaction with Stop Solution (Catalog # DY994).

---

**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**

TREM-2 is a single Ig domain receptor expressed by cells of myeloid lineage. It is a pattern recognition receptor that binds anionic ligands. TREM-2 associates with the adapter protein DAP12 to deliver an activating signal that plays a role in both innate and adaptive immune responses.