**DESCRIPTION**

**Species Reactivity**
Mouse

**Specificity**
Detects mouse IL-27/IL-35 EBI3 Subunit in direct ELISAs and Western blots. In direct ELISAs and Western blots, this antibody does not cross-react with recombinant human IL-27/IL-35 EBI3 subunit.

**Source**
Monoclonal Rat IgG\_2A Clone # 355022

**Purification**
Protein A or G purified from hybridoma culture supernatant

**Immunogen**
Mouse myeloma cell line NS0-derived recombinant mouse IL-27 heterodimer

* Tyr19-Pro228 (EBI3) & Phe29-Ser234 (p28)*

Accession # O35228 (EBI3) & Q8K3I6 (p28)

**Formulation**
Lyophilized from a 0.2 \( \mu \)m 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 \( \mu \)m 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.

**Recommended Concentration**

<table>
<thead>
<tr>
<th>Sample</th>
<th>Concentration</th>
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<tbody>
<tr>
<td>Western Blot</td>
<td>2 ( \mu )g/mL</td>
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**DATA**

**Western Blot**

Detection of Mouse IL-27/IL-35 EBI3 Subunit by Western Blot. Western blot shows lysates of CHO Chinese hamster ovary cell line either mock transfected or transfected with mouse EBI3. PVD membrane was probed with 2 \( \mu \)g/mL of Rat Anti-Mouse IL-27/IL-35 EBI3 Subunit Monoclonal Antibody (Catalog # MAB18341) followed by HRP-conjugated Anti-Rat IgG Secondary Antibody (Catalog # HAF005). A specific band was detected for IL-27/IL-35 EBI3 Subunit at approximately 30 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

**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. *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**

IL-27 is a heterodimeric cytokine comprised of the IL-12 p35-related protein, p28, and the IL-12 p40-related protein, EBI3 (Epstein-Barr virus-induced gene 3). IL-27 is expressed by monocytes, endothelial cells and dendritic cells. It binds TCCR/WSX-1 on naïve CD4\(^+\) T cells and induces the expression of a functional IL-12 receptor, making these cells sensitive to IL-12-mediated Th1 cell development. Human EBI3 also associates with the p35 subunit of IL-12 to form IL-35 which is important for immunosuppressive Treg cell induction. EBI3 is 61% amino acid (aa) identical to mouse EBI3 and includes an 20 aa signal peptide anda 209 aa mature protein with two fibronectin type III domains.