

## Datasheet for 210-306-C55

**IL-35 EBI3 Biotin Conjugated Antibody****Overview**

<b>Description:</b>	Anti-Mouse EBI-3 (MOUSE) Biotin Conjugated Monoclonal Antibody - 210-306-C55
<b>Item No.:</b>	210-306-C55
<b>Size:</b>	100 µg
<b>Applications:</b>	ELISA, IP, WB
<b>Reactivity:</b>	Mouse
<b>Host Species:</b>	Mouse

**Product Details**

**Background:** The cytokine Interleukin 27 (IL-27) is produced in response to inflammation. It is made by activated antigen presenting cells including monocytes, endothelial cells, and dendritic cells. IL-27 consists of a heterodimeric combination of Epstein-Barr virus-induced molecule 3 (EBI3, or IL-27B) non-covalently linked with IL-27 p28 (or IL-27A). It is a regulator of T helper cell development and suppressor of T-cell proliferation. IL-27 has both pro- and anti-inflammatory properties. It can stimulate cytotoxic T cell activity and induce isotype switching in B-cells. It has diverse effects on innate immune cells. It induces monocytes and mast cells to secrete pro-inflammatory cytokines. When infection is present, IL-27 induces naive CD4+ T cells to proliferate and develop Th1 cell responses. As an anti-inflammatory regulator, IL-27 can inhibit Th1 or Th2 responses and restrict the strength and duration of adaptive immune responses.

The IL-27 p28 subunit, a 28 kDa glycoprotein belonging to the type I cytokine family, is homologous to IL-12 p35, IL-23 p19, and IL-6. The EBI3 (Epstein-Barr virus-induced molecule 3, or IL-27B) subunit is a 34 kDa glycoprotein containing two fibronectin type III domains, and belongs to the type I cytokine receptor family. It can exist as a homodimer and can also heterodimerize with IL-27 p28 or IL-12 p35 subunit. It is homologous to the p40 subunit of IL-12 and IL-23 and to the extracellular domain of IL-6 R.

<b>Synonyms:</b>	mouse anti-EBI3 biotin conjugated antibody, mouse anti-IL-35 biotin conjugated antibody, Epstein-Barr virus induced 3 protein, Interleukin-27 subunit beta, IL-27 subunit beta, IL-27B, Epstein-Barr virus-induced gene 3 protein, EBV-induced gene 3 protein, EBI-3, EBI3, IL-35, IL35
<b>Host Species:</b>	Mouse
<b>Conjugate:</b>	Biotin
<b>Clonality:</b>	Monoclonal

Clone ID: V1.4H6.29

Format: IgG2b

F/P Ratio: 10-20

## Target Details

Gene Name: Ebi3

Reactivity: Mouse

Immunogen Type: Recombinant Protein

**Immunogen:** Anti-EBI-3 (MOUSE) Monoclonal Antibody was produced in mouse by repeated immunizations with mature full length recombinant mouse EBI-3 produced in E.coli followed by hybridoma development.

**Purity/Specificity:** This product was purified from mouse ascites by Protein A chromatography followed by extensive dialysis against the buffer stated above. This antibody is specific for mouse EBI3 protein. A BLAST analysis was used to suggest cross-reactivity with EBI3 from mouse sources based on 100% homology with the immunizing sequence. Cross-reactivity with EBI-3 from other sources has not been determined.

**Relevant Links:**

- [UniProtKB - O35228](#)
- [NCBI - NP\\_056581.1](#)
- [GeneID - 50498](#)

## Application Details

**Tested Applications:** ELISA, IP, WB

**Application Note:** This purified antibody has been tested for use in ELISA, IP, and Western Blot. Specific conditions for reactivity should be optimized by the end user.

**Assay Dilutions:** All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

**ELISA:** 1:10,000

**IP:** 1µg/mL

**WB:** 1:1000

## Formulation

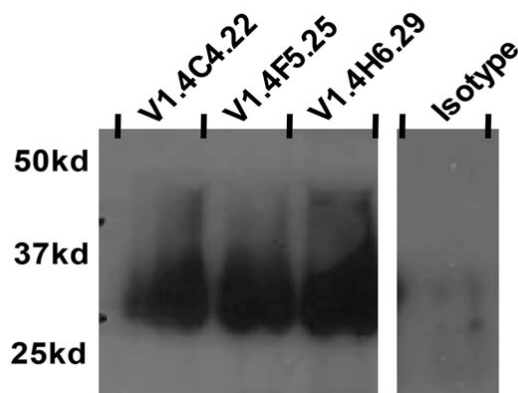
**Physical State:** Lyophilized

<b>Concentration:</b>	1.0 mg/mL by UV absorbance at 280 nm
<b>Buffer:</b>	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
<b>Preservative:</b>	0.01% (w/v) Sodium Azide
<b>Stabilizer:</b>	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
<b>Reconstitution Volume:</b>	100 $\mu$ L
<b>Reconstitution Buffer:</b>	Restore with deionized water (or equivalent)

## Shipping & Handling

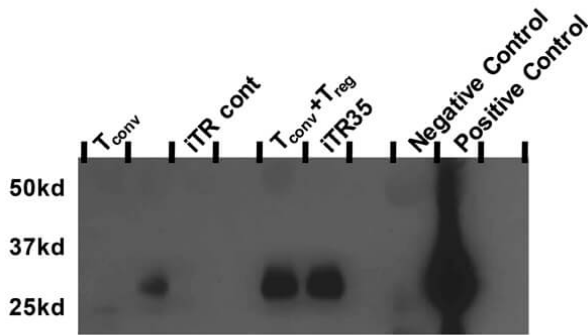
<b>Shipping Condition:</b>	Ambient
<b>Storage Condition:</b>	Store vial at 4° C prior to restoration. Restore with 0.1 mL of deionized water (or equivalent). For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
<b>Expiration:</b>	Expiration date is one (1) year from date of receipt.

## Images



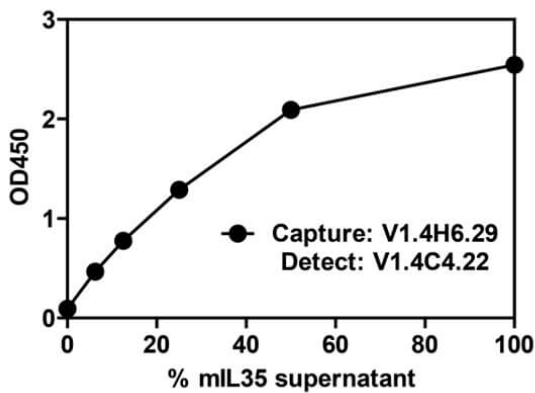
### Immunoprecipitation

Immunoprecipitation of Mouse Anti-EBI-3 Antibody. Supernatant from 293T cells transfected with a vector containing murine IL-35 was immunoprecipitated with indicated anti-EBI-3 monoclonal clones V1.4H6.29, V1.4C4.22, and V1.4F5.25 plus Protein G beads, resolved by SDS page gel, and blotted with biotinylated anti-mouse EBI-3 clone V1.4H6.29 at 1 $\mu$ g/mL.



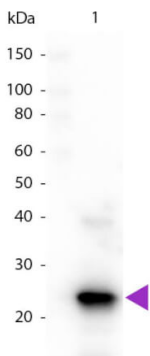
#### Western Blot

Western blot of Anti-Mouse EBI-3 Antibody. Supernatants from cultures containing indicated cells were immunoprecipitated with an anti-p35 monoclonal plus protein G beads, resolved by SDS page gel and blotted with biotinylated anti mouse-EBI-3 clone V1.4H6.29 at 1 µg/mL. The controls were supernatants from 293T cells transfected with either vector only (negative) or vector containing murine IL-35 (positive).



#### ELISA

ELISA assay of EBI-3 Antibody. Supernatant from 293T cells transfected with a vector containing murine IL-35 was added to an ELISA plate coated with V1.4H6.29 (210-301-C55) at 2µg/mL in PBS. Mouse EBI-3 was detected with biotinylated V1.4C4.22 (210-301-B66).



#### Western Blot

Western blot of Biotin conjugated Mouse Anti-EBI-3 (Mouse) antibody. Lane 1: Mouse EBI-3. Lane 2: None. Load: 50 ng per lane. Primary antibody: EBI-3 (Mouse) primary antibody at 1:1,000 for 60 min at RT. Secondary antibody: Peroxidase streptavidin secondary antibody at 1:40,000 for 30 min at RT. Block: MB-070 for 30 min at RT. Predicted\Observed size: 25 kDa, 25 kDa for Mouse EBI-3. Other band(s): None.

### Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.