

Datasheet for 210-506-B66

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

Description:	Anti-Mouse EBI-3 (RAT) Biotin Conjugated Monoclonal Antibody - 210-506-B66
Item No.:	210-506-B66
Size:	100 µg
Applications:	FC
Reactivity:	Mouse
Host Species:	Rat

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.

Synonyms: rat anti-IL-35 biotin conjugated antibody, rat anti-EBI3 biotin conjugated Antibody, Interleukin-27 subunit beta, IL-27 subunit beta, IL-27B, Epstein-Barr virus-induced gene 3 protein, EBV-induced gene 3 protein, EBI3, EBI-3, IL-35, IL35

Host Species:	Rat
Conjugate:	Biotin
Clonality:	Monoclonal

Clone ID:	10J811
Format:	IgG
F/P Ratio:	10-20

Target Details

Gene Name:	Ebi3
Reactivity:	Mouse
Immunogen Type:	Recombinant Protein
Immunogen:	Anti-EBI-3 (RAT) Monoclonal Antibody was produced in rat 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 concentrated tissue culture supernate by Protein G 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:	<ul style="list-style-type: none">• UniProtKB - O35228• NCBI - NP_056581.1• GeneID - 50498

Application Details

Tested Applications:	FC
Application Note:	This purified antibody has been tested for use in ELISA, Western Blot, and Flow Cytometry. 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:	User Optimized
FC:	1.5-3.0µg/10x6 cells
WB:	1µg/mL

Formulation

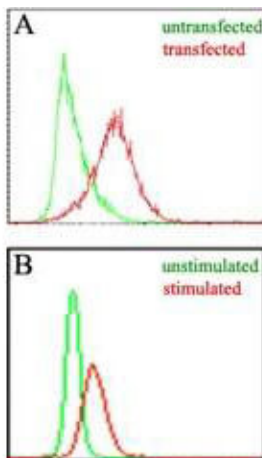
Physical State:	Lyophilized
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Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin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

Shipping & Handling

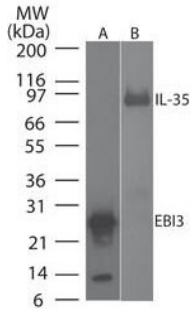
Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. Restore with 0.1 mL of deionized water (or equivalent). For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing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

Images



Flow Cytometry

Flow Cytometry of Anti-Mouse EBI-3 Antibody Figure A: Intracellular flow cytometry of mouse EBI3 in transfected and untransfected HEK 293 cells (Brefeldin A treated, 5 hours) using mouse EBI3 antibody at 3 μ g/ 10^6 cells. Figure B: Intracellular flow cytometry of mouse EBI3 in stimulated and unstimulated RAW cells (LPS treated, 50 ng/mL, overnight) using mouse EBI3 antibody at 1.5 μ g/ 10^6 cells.



Western Blot

Western Blot of Mouse Anti-EBI-3 Monoclonal Antibody. A) 0.1 ug/mL on recombinant protein. B) 3 ug/ml on recombinant mouse IL-35 protein. Goat anti-rat IgG HRP secondary antibody and PicoTect ECL substrate solution were used for this test.

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.