

Datasheet for 210-501-B66**IL-35 EBI3 Antibody****Overview**

Description:	Anti-Mouse EBI-3 (RAT) Monoclonal Antibody - 210-501-B66
Item No.:	210-501-B66
Size:	100 µg
Applications:	ELISA, FC, WB
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 antibody, rat anti-EBI3 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
Clonality:	Monoclonal
Clone ID:	10J811

Format: IgG

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:	• UniProtKB - O35228 • NCBI - NP_056581.1 • GenelD - 50498

Application Details

Tested Applications:	ELISA, FC, WB
Application Note:	Anti-EBI-3 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:	Liquid (sterile filtered)
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: None

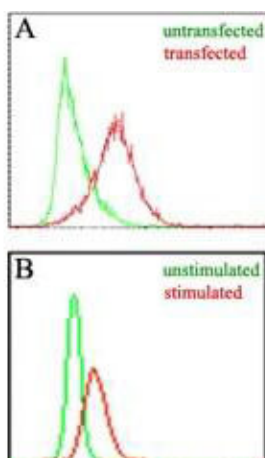
Shipping & Handling

Shipping Condition: Dry Ice

Storage Condition: Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. 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

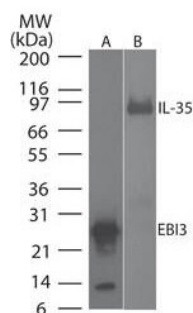


Flow Cytometry

Flow Cytometry of Anti-Mouse EBI3 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 $\mu\text{g}/10^6$ 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 $\mu\text{g}/10^6$ cells.

Western Blot

Western Blot of Mouse Anti-EBI3 monoclonal antibody at A) 0.1 $\mu\text{g}/\text{ml}$ on recombinant protein and B) 3 $\mu\text{g}/\text{ml}$ on recombinant mouse IL-35 protein. Goat anti-rat IgG HRP secondary antibody and PicoTect ECL substrate solution were used for this test.



Disclaimer

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