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Datasheet for 210-501-B66S

IL-35 EBI3 Antibody

Overview

Description:	Anti-Mouse EBI-3 (RAT) Monoclonal Antibody - 210-501-B66S
Item No.:	210-501-B66S
Size:	25 µL
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:	• GeneID - 50498 • NCBI - NP_056581.1 • UniProtKB - O35228

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

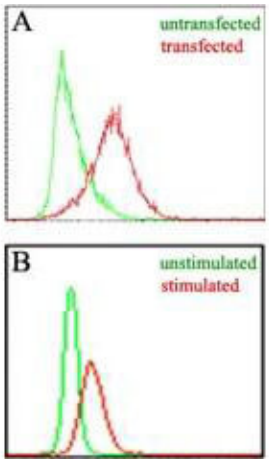
Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

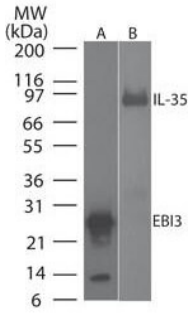
Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.
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 ug/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 ug/10^6 cells.



Western Blot
Western Blot of Mouse Anti-EBI3 monoclonal antibody at A) 0.1 ug/ml on recombinant protein and 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.

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