



## Anti-Mouse EBI-3 (MOUSE) Monoclonal Antibody - 210-301-C56

**Code:** 210-301-C56

**Size:** 100 µg

**Product Description:** Anti-Mouse EBI-3 (MOUSE) Monoclonal Antibody - 210-301-C56

**Concentration:** 1 mg/ml by UV absorbance at 280 nm

**PhysicalState:** Liquid (sterile filtered)

<b>Label</b>	Unconjugated
<b>Host</b>	Mouse
<b>Gene Name</b>	EBI3
<b>Species Reactivity</b>	Mouse
<b>Buffer</b>	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
<b>Stabilizer</b>	None
<b>Preservative</b>	0.01% (w/v) Sodium Azide
<b>Storage Condition</b>	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.
<b>Synonyms</b>	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
<b>Application Note</b>	EBI-3 antibody has been tested for use in IP and Neutralization. Specific conditions for reactivity should be optimized by the end user.
<b>Background</b>	<p>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.</p> <p>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.</p>
<b>Purity And Specificity</b>	Anti-EBI-3 was purified from concentrated tissue culture supernate 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.
<b>Assay Dilutions</b>	User Optimized
<b>ELISA</b>	1:10,000
<b>WESTERN BLOT</b>	1:1000
<b>NEUTRALIZATION</b>	10µg/mL
<b>OTHER ASSAYS</b>	User Optimized
<b>Expiration</b>	Expiration date is one (1) year from date of opening.
<b>Immunogen</b>	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.
<b>General Reference</b>	<p>Lyakh L, Trinchieri G, Provezza L, Carra G, and Gerosa F. Regulation of interleukin-12/interleukin-23 production and the T-helper 17 response in humans. Immunol Rev. 226: 112-131. 2008.</p> <p>Pflanz S., Timans J.C., Cheung J., Rosales R., Kanzler H., Gilbert J., Hibbert L., Churakova T., Travis M., Vaisberg E., Blumenschein W.M., Mattson J.D., Wagner J.L., To W., Zurawski S., McClanahan T.K., Gorman D.M., Bazan J.F., Kastelein R.A. (2002). IL-27, a heterodimeric cytokine composed of EBI3 and p28 protein,</p>

induces proliferation of naive CD4(+) T cells. Immunity 16:779-790 [PubMed: 12121660]

Collison LW, Workman CJ, Kuo TT, Boyd K, Wang Y, Vignali KM, Cross R, Sehy D, Blumberg RS, and Vignali DAA. (2007) The inhibitory cytokine IL-35 contributes to regulatory T-cell function. Nature 450 (7169): 566-9. doi:10.1038/nature06306. PMID 18033300

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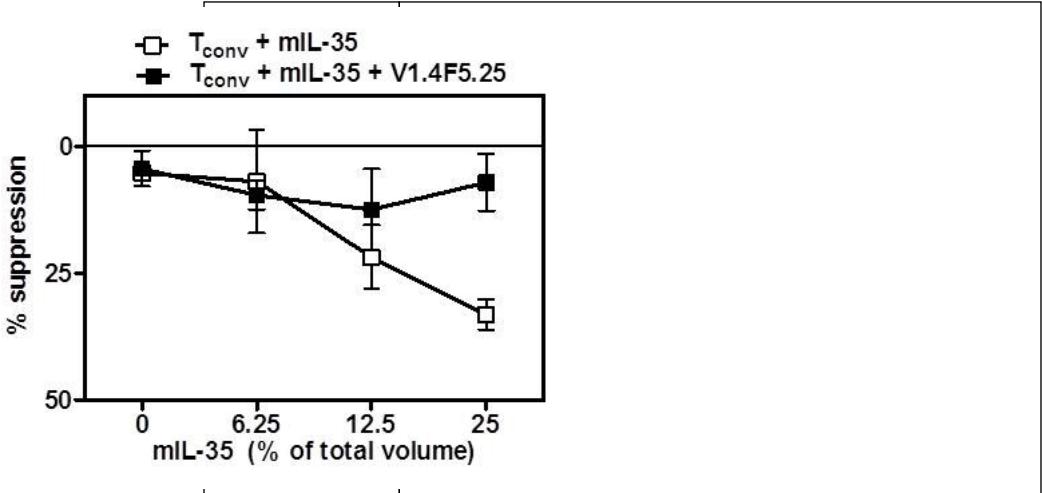
010-001-B54	IL-27/p28 Mouse Recombinant Protein - 010-001-B54(1)
010-001-B66	EBI-3 Mouse Recombinant Protein - 010-001-B66(1)
210-406-B54	Anti-Mouse IL-27/p28 (RABBIT) Antibody Biotin Conjugated - 210-406-B54
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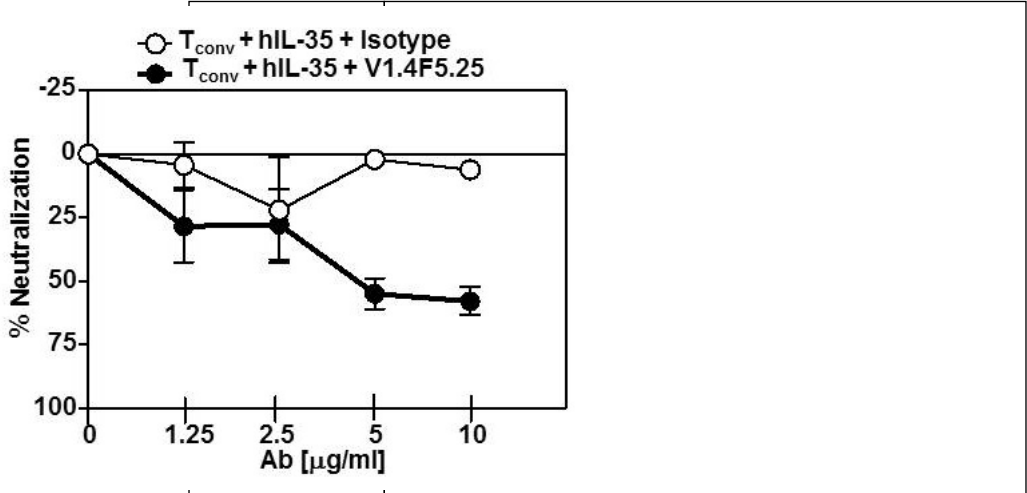
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Images

1 Neutralization: Murine CD4+CD25- (Tconv) were purified by FACS, activated with anti-CD3/CD28-coated beads in the presence of a titration of mIL-35 and 10µg/ml of 210-301-C56 antibody. Percent suppression was determined by calculating the percent decrease in counts per minute of activated Tconv plus or minus murine IL-35.



2 Neutralization: Human CD4+CD25- (Tconv) were purified by FACS from cord blood, activated with anti-CD3/CD28-coated beads and 10IU IL-2 in the presence of hIL-35 and a titration of an isotype control or 210-301-C56 antibody. Percent neutralization was determined by calculating the percent decrease in counts per minute of activated Tconv plus (0%) or minus (100%) human IL-35 in the presence and absence of Ab.



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