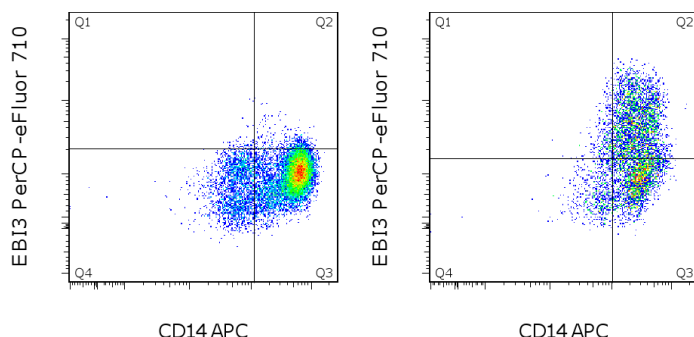


## Anti-Human IL-27 EBI3 PerCP-eFluor® 710

**Catalog Number:** 46-7358

**Also known as:** Interleukin-27, Epstein-Barr Virus-Induced Gene3

**RUO: For Research Use Only. Not for use in diagnostic procedures.**



Normal human peripheral blood cells unstimulated (left) or stimulated with Human IFN gamma Recombinant Protein (cat. 14-8319), LPS, and the Imidazoquinoline, R848, in the presence of Protein Transport Inhibitor Cocktail (cat. 00-4980) and stained intracellularly with Anti-Human CD14 APC (cat. 17-0149) and Anti-Human IL-27 EBI3 PerCP-eFluor® 710. Cells in the monocyte gate were used for analysis.

### Product Information

**Contents:** Anti-Human IL-27 EBI3 PerCP-eFluor® 710



**Catalog Number:** 46-7358

**Clone:** ebic6

**Concentration:** 5 uL (0.03 ug)/test

**Host/Isotype:** Mouse IgG2b, kappa

**Formulation:** aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer

**Temperature Limitation:** Store at 2-8°C. Do not freeze. Light-sensitive material.

**Batch Code:** Refer to vial

**Use By:** Refer to vial



### Description

This ebic6 monoclonal antibody reacts with human Epstein-Barr Virus Induced Gene 3 (EBI3). EBI3 can be expressed and secreted as monomers or homodimers, and was first identified in virally-infected B cells. It is also believed to be secreted as a homodimer by cells of the trophoblast, where it may play a role in immune tolerance during pregnancy.

Additionally, EBI3 is a component of two of the four members of the interleukin (IL)-12 family of heterodimeric cytokines. EBI3 was first found to heterodimerize with p28 (IL-30) to form IL-27, which is secreted by antigen-presenting cells in response to pro-inflammatory stimuli. IL-27 has been shown to have both pro-inflammatory and anti-inflammatory effects. It influences the commitment of CD4+ T-cells toward the Th1 lineage by inducing the expression of the T-bet transcription factor and the upregulation of IL-12R beta 2. Its anti-inflammatory functions include the suppression of Th2 and Th17 proliferation and differentiation.

More recently, EBI3 was also found to dimerize with the IL-12 subunit, p35 to form IL-35. The biology of IL-35 is incompletely understood, but it is believed to be unique among the IL-12 family members in its expression and function. It is produced by regulatory T cells, and appears to have immunoregulatory functions. IL-35 has been found to suppress the proliferation and function of effector T cells, and has also been observed to induce a regulatory phenotype on naïve CD4+ cells cultured in its presence.

ELISA results from the culture of human dendritic cells stimulated shown above suggests that at least some of the EBI3 detected by flow is dimerized with p28 to form IL-27. Testing with ebic6 in the context of IL-35 is currently in process. For more information, please contact technical support.

### Applications Reported

This ebic6 antibody has been reported for use in intracellular staining followed by flow cytometric analysis.

### Applications Tested

This ebic6 antibody has been pre-titrated and tested intracellular staining followed by flow cytometric analysis. This

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can be used at 5 µL (0.03 µg) per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test.

PerCP-eFluor® 710 can be used in place of PE-Cy5, PE-Cy5.5 or PerCP-Cy5.5. PerCP-eFluor® 710 emits at 710 nm and is excited with the blue laser (488 nm). Please make sure that your instrument is capable of detecting this fluorochrome. For a filter configuration, we recommend using the 685 LP dichroic mirror and 710/40 band pass filter, however the 695/40 band pass filter is an acceptable alternative.

Our testing indicates that PerCP-eFluor® 710 conjugated antibodies are stable when stained samples are exposed to freshly prepared 2% formaldehyde overnight at 4°C, but please evaluate for alternative fixation protocols.

Click [here](#) or contact eBioscience Technical Support for more information on eFluor™ Organic Dyes including PerCP-eFluor® 710.

### References

Collison LW, Chaturvedi V, Henderson AL, Giacomini PR, Guy C, Bankoti J, Finkelstein D, Forbes K, Workman CJ, Brown SA, Rehng JE, Jones ML, Ni HT, Artis D, Turk MJ, Vignali DA. IL-35-mediated induction of a potent regulatory T cell population. *Nat Immunol*. 2010 Dec;11(12):1093-101.

Goriely S., Neurath MF., and Goldman M. How microorganisms tip the balance between interleukin-12 family members. *Nat Rev Immunol*. 2008 Jan;8(1):81-6

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### Related Products

00-4980 Protein Transport Inhibitor Cocktail (500X)

14-8319 Human IFN gamma Recombinant Protein

17-0149 Anti-Human CD14 APC (61D3)

46-4732 Mouse IgG2b K Isotype Control PerCP-eFluor® 710

88-7278 Human IL-27 ELISA Ready-SET-Go!®