

Instruction manual FOR RESEARCH USE ONLY NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

Recombinant Human IL-35 (IL12A &EBI3 Heterodimer) Protein (Fc Tag)

Cat.NO.: TP06324

3th Edition

Synonyms:CLMF;IL-12A;IL-35;Interleukin-35;NFSK;NKSF1;P35

Description: The novel Ebi3-IL-12alpha heterodimeric cytokine has been designated interleukin-35 (IL-35), is a member IL12 family cytokine produced by regulatory T cells (Treg), but not by resting or activated effector T cells (Teff). IL-35 is a heterodimeric protein composed of IL-12? (P35) and IL-27? chains, which are encoded by two separate genes called IL12A and EBI3 (Epstein-Barr-virus-induced gene 3) respectively. Ectopic expression of IL-35 confers regulatory activity on naive T cells, whereas recombinant IL-35 suppresses T-cell proliferation. It identify IL-35 as a novel inhibitory cytokine that may be specifically produced by T(reg) cells and is required for maximal suppressive activity. IL-35 has biological activity and able to expand CD4+CD25+ Treg cells, suppress the proliferation of CD4+CD25- effector cells and inhibit Th17 cell polarization. IL-35 has been shown to be constitutively expressed by regulatory T (Treg) cells CD4(+)CD25(+)Foxp3(+) and suggested to contribute to their suppressive activity. IL-35 is a crucial mediator which provokes CD4+CD25+ T cell proliferation and IL-10 generation, another well-known anti-inflammatory cytokine, along with TGFbeta cytokine. IL-35 is a cytokine can downregulate Th17 cell development and inhibit autoimmune inflammation. It inhibited the differentiation of Th17 cells in vitro. In vivo, IL-35 effectively attenuated established collagen-induced arthritis in mice, with concomitant suppression of IL-17 production but enhanced IFN-gamma synthesis. Thus, IL-35 is a novel anti-inflammatory cytokine suppressing the immune response through the expansion of regulatory T cells and suppression of Th17 cell development.

Form:PBS

Molecular Weight:73.4 kDa

Sequences: Met 1-Lys 229

Purity:> 95% by HPLC

Concentration:

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage:Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

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