

Recombinant Human Interleukin-35 Protein**Cat.NO.: TP05199**

3th Edition

Synonyms:Interleukin 35; IL35; hIL35

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 α (P35) and IL-27 β 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:**73.9 kDa**Sequences:**Arg21-Lys229&Arg23-Ser219**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.