

Recombinant Human Interleukin-12 Subunit Beta/IL-12B (C-His)

Catalog No: BP088

Description	Recombinant Human Interleukin-12 Subunit Beta is produced by Human 293 Cells. The target gene encoding I23-S328 is expressed with a 6His tag at the C terminus.
Expression System	Human
Alternative name	IL12B; CLMF; CLMF2; NKSF; NKSF2; p40
Accession No.	P29460
Predicted Molecular Weight	37.3kDa
Apparent Molecular Weight	IL-12B appeared as a smear between 40-50kDa in a reducing SDS-PAGE gel due to glycosylation.
Quality Control	Purity: greater than 95% as determined by reducing SDS-PAGE. Endotoxin: less than 0.1 ng/μg (1 EU/μg) as determined by TAL test.
Formulation	PBS, pH 7.2
Reconstitution	It is not recommended to reconstitute to a concentration less than 100μg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
Storage	Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months. Always centrifuge tubes before opening. Do not mix by vortex or pipetting.
Background	Interleukin-12 (IL-12) is a heterodimeric pleiotropic cytokine that consists of IL12A (p35) and IL12B (p40) subunits. IL 12 is expressed by macrophages and B lymphocytes and act as a growth factor for activated T and NK cells, help enhance the lytic activity of NK/lymphokine-activated killer cells, and stimulate the production of IFN-gamma by resting PBMC. Studies have shown that IL 12 is a key mediator of cellular-immunity and induces the differentiation of Th1 cells from precursor T helper cells. Based on its activities, it has been predicted that IL 12 may have therapeutic potential as a vaccine adjuvant that promotes cellular-immunity and as an anti-tumor and anti-viral agent. Interleukin-12 subunit beta (IL12B) has been shown to interact with IL23. A large excess of monomeric IL12B is also secreted by the cells producing IL12, and exhibits no demonstrable biological activity. Overexpression of IL12B gene has been shown to be associated with the pathogenesis of multiple sclerosis.

SDS-PAGE

