

Recombinant Human IL-12 p40 protein(His Tag)

Catalog No. PKSH034191

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description

Synonyms	Interleukin-12 subunit beta;IL-12 subunit p40;IL-12B;Cytotoxic Lymphocyte Maturation Factor 40 kDa subunit (CLMF p40);NK cell Stimulating Factor Chain 2
Species	Human
Expression Host	E.coli
Sequence	Ile 23-Ser 328
Accession	P29460
Calculated Molecular Weight	35.6 kDa
Observed molecular weight	45 kDa
Tag	C-His
Bioactivity	Measure by its ability to induce cell proliferation in PHA-activated human peripheral blood lymphocytes (PBMC) using a concentration range of 5-50 ng/mL. Note: Results may vary from different PBMC donors.

Properties

Purity	> 98 % as determined by reducing SDS-PAGE.
Endotoxin	< 0.1 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS,pH 8.0. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Background

Interleukin-12 subunit beta (IL-12B) belongs to the type I cytokine receptor family. It contains 1 fibronectin type-III domain and 1 Ig-like C2-type domain. IL-12B is a cytokine that acts on T and natural killer cells, and has a broad array of biological activities. IL-12 is a disulfide-linked heterodimer composed of the 40 kD cytokine receptor encoded by IL12B and a 35 kD subunit encoded by IL12A. IL12 is expressed by activated macrophages that serve as an essential inducer of Th1 cells development. It has been found to be important for sustaining a sufficient number of memory/effector Th1 cells to mediate long-term protection to an intracellular pathogen.

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