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## Recombinant Human IL-12 p40 protein(His Tag)

Catalog Number: PKSH034191

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

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Species Human

Source E.coli-derived Human IL-12 p40 protein Ile 23-Ser 328, with an C-terminal His

 Mol\_Mass
 35.6 kDa

 Accession
 P29460

**Bio-activity** 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% Tween 80 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.