

CHAMOT

Recombinant IL-15, Human, GMP

CM016-100HPG

CM016-1000HPG



CHAMOT

乔默®生物

Specialize In Cytokines



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Recombinant IL-15, Human, GMP

Catalog#	CM016-100HPG	CM016-1000HPG
Size	100 ug	1 mg

Product Specifications

Background

Interleukin-15 (IL-15) is a 14-15 kDa glycoprotein with immune regulatory functions in many diverse cell types. IL-15 can be constitutively expressed in a variety of cell types stored as intracellular protein in the cytoplasm as well as transport to the cell surface, while only secreted from some cell types including monocytes, dendritic cells, epithelial cells, bone marrow stromal cells, and fibroblasts. As a pleiotropic cytokine, IL-15 mediates the crosstalk between innate immunity and adaptive immunity whose principal role is to kill virally infected cells. IL-15 plays a crucial role in the development, differentiation, and survival of NK cells. In monocytes, IL-15 induces the production of IL-8 and monocyte chemotactic protein 1 (MCP-1), which recruits neutrophils and monocytes to sites of infection. IL-15 can also act as a chemo-attractant in T lymphocytes and regulate the differentiation of T lymphocytes.

Synonyms

interleukin 15, IL-T, IL15

Uniprot ID

P40933

Molecular Weight

The protein has a calculated MW of 13.7 kDa. The protein migrates as 13 kDa under reducing condition (SDS-PAGE analysis).

Expression System

Escherichia coli

Purity

>95% as determined by SDS-PAGE analysis.

Activity

Measure by its ability to induce proliferation in CTLL-2 cells. The ED₅₀ for this effect is < 3 ng/mL. The specific activity of recombinant human IL-15 is > 2 x 10⁶ IU/mg, which is calibrated against the human IL-15 WHO International Standard (NIBSC code: 95/554).

Endotoxin Level

<0.05 EU per 1 µg of the protein by the LAL method.

Protein Sequence

NWVNVISDLKKIEDLIQSMHIDATLYTESDVHPSCKVTAMKCFLELQVISLESGDASIHTVENLIILAN NSLSSNGNVTESGCKECEELEEKNIKEFLQSFVHIVQMFIN TS with polyhistidine tag at the N-terminus.

Form

Lyophilized from a 0.2 µm filtered solution of PBS, pH 8.0.

Application

Cell Culture

Product Note

Centrifuge at 3000 rpm for 5 mins before opening. It is recommended to reconstitute the lyophilized protein in sterile H₂O to a concentration not less than 0.5 mg/mL and incubate the stock solution at RT for at least 20 min to ensure sufficient re-dissolved. Do Not Vortex! Vigorous shaking may impair the biological activity of the protein.

Storage/Shipping

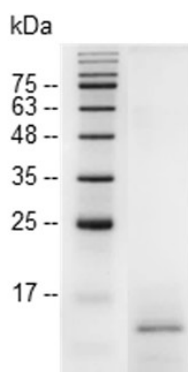
Stability & Storage

Lyophilized protein should be stored at -20°C for 1 year. Upon reconstitution, store at 2°C to 8°C for up to 1 week. Further dilute in a buffer containing a carrier protein or stabilizer (e.g. 0.1% BSA, 10%FBS, 5%HSA or 5% trehalose solution), protein aliquots should be stored at -20°C or -80°C for 3-6 months. Avoid repeated freeze/thaw cycles.

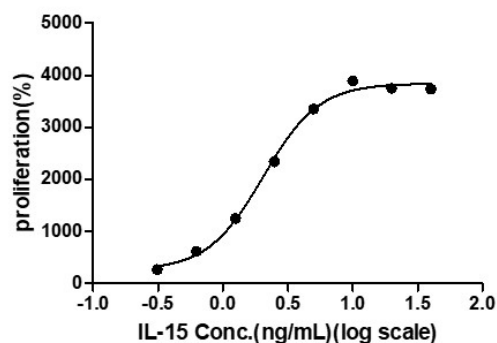
Shipping

Blue Ice

Scientific Data



SDS- PAGE analysis of GMP human IL-15



GMP Human IL-15 Protein, His Tag, E. coli induces CTLL-2 cell proliferation, with the ED₅₀ <3 ng/mL.

For Research Use or Further Manufacturing Only

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