

Human recombinant IL-15 protein, GMP

Catalog Number: PROTP40933-6

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| Product Name | Human recombinant IL-15 protein, GMP |
| Description | 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 chemoattractant 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. |
| Size | 100ug,1mg |
| Tag | His Tag (N-term) |
| Form | Lyophilized |
| Source | Escherichia coli |
| Formulation | Lyophilized from a 0.2 um filtered solution of PBS, pH 8.0. |

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.

Purity

>95% as determined by SDS-PAGE analysis.

Molecular weight

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

Activity

Measure by its ability to induce proliferation in CTLL-2 cells. The ED₅₀ for this effect is 2 x 10² IU/mg, which is calibrated against the human IL-15 WHO International Standard (NIBSC code: 95/554).

Endotoxin

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

Amino Acid Sequence

NWVNVISDLKKIEDLIQSMHIDATLYTESDVHPCKVTAMKCFLELQVISLESGDASIHDTVENLIILANNSLSSNGNVTESGCKECEEEKNIKEFLQSFVHIVQMFINTSLE with polyhistidine tag at the N-terminus.

Reconstitution

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.

Usage

Boster's products are furnished for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.

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