

GMP Human IL-15

Cat. No. GMP-CKS-HE015

Description

Source	Recombinant GMP Human IL-15 is expressed from E.coli without tag. It contains Asn49-Ser162.
Accession	P40933
Molecular Weight	The protein has a predicted MW of 12.8 kDa same as Bis-Tris PAGE result.
Endotoxin	≤ 0.01 EU per µg by the LAL method.
Purity	≥ 95% as determined by SEC-HPLC.

Formulation and Storage

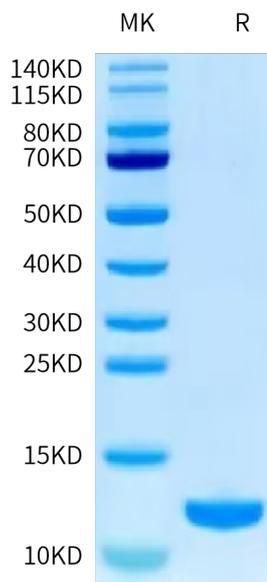
Formulation	Lyophilized from 0.22 µm filtered solution in 20 mM Tris, 150 mM NaCl (pH 7.5). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Please refer to the Certificate of Analysis for detailed instructions.
Storage	The product is shipped with ice bag. Store it immediately at -20°C±5°C upon arrival. -20°C±5°C for 36 months in lyophilized state. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

IL-15 belongs to the common gamma chain cytokine family and has pleiotropic immunological functions, and the protein is mainly produced by monocytes, dendritic cells, and epithelial cells. IL-15 plays a crucial role in the development, homeostasis, and function of T, NK and NK-T cells, and is additionally required for various functions of the B cells, dendritic cells (DC), macrophages, and mast cells. Stimulation by IL15 requires interaction of IL15 with components of the IL2 receptor, including IL2RB and probably IL2RG but not IL2RA.

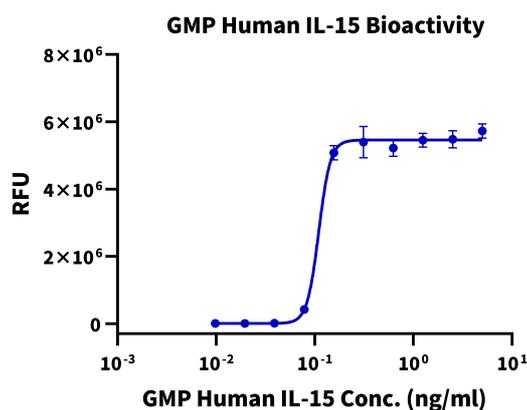
Assay Data

Bis-Tris PAGE



GMP Human IL-15 on Bis-Tris PAGE under reduced condition.

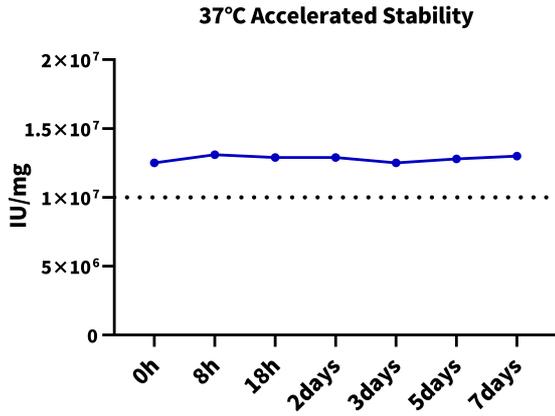
Cell Based Assay



Measured in a cell proliferation assay using CTLL-2 cells. The ED50 for this effect is 0.1 - 0.3 ng/mL. The specific activity of GMP Human IL-15 is $> 1 \times 10^7$ IU/mg, which is calibrated against the human IL-15 WHO reference standard (NIBSC code: 95/554) (QC Test).

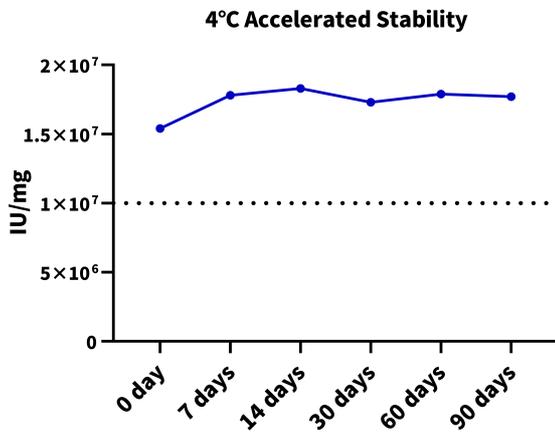
Assay Data

37 Stability Test



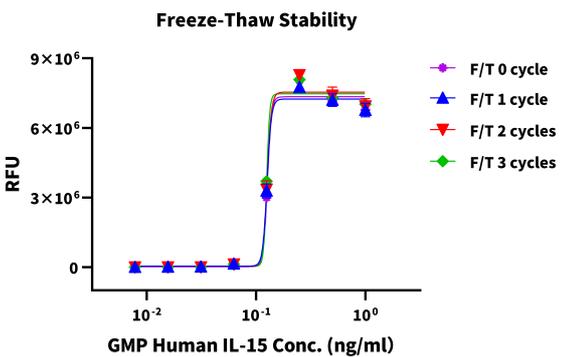
GMP Human IL-15 (reconstituted protein) was stored at 37°C, the protein is stable for 7 days determined by cell based assay.

4 Stability Test



GMP Human IL-15 (reconstituted protein) was stored at 4°C, the protein is stable for 90 days determined by cell based assay.

Freeze-Thaw Stability Test



GMP Human IL-15 (reconstituted protein) was repeatedly frozen at -80°C and thawed at 37°C, the protein is stable after freezing and thawing 3 cycles determined by cell based assay.