

Backgound:

Human Interleukin-15 (IL-15) is expressed by the IL15 gene located on the chromosome 4. It shares approximately 97% and 73% sequence identity with simian and murine IL-15, respectively. Both human and simian IL-15 are active on murine cells. IL-15 is secreted by mononuclear phagocytes (and some other cells), especially macrophages following infection by virus. It possesses a variety of biological functions, including stimulating and maintaining of cellular immune responses, especially regulating T and natural killer (NK)

cell activation and proliferation. In additionally, it shares many biological properties with IL-2, including T, B and NK cell-stimulatory activities. IL-15 signals through a complex composed of IL-2/IL-15 receptor beta chain.

Source:

Recombinant Human IL-15 is expressed from Escherichia coli. It contains AA Asn 49 - Ser 162. Predicted molecular mass 15.5 kDa. This protein carries a polyhistidine tag at the N-terminus.



Endotoxin:

Less than 1.0 EU per μg by the LAL method.

AA Sequence:

NWVNVISDL KKIEDLIQSM HIDATLYTES DVHPSCKVTA MKCFLLELQV ISLESGDASI HDTVENLIIL ANNSLSSNGN VTESGCKECE ELEEKNIKEF LQSFVHIVQM FINTS

Purity:

Purity >90% as determined by SDS-PAGE.

Formulation:

Lyophilized from 0.22 μ m filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization. Contact us for customized product form or formulation.

Reconstitution

Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at < -20° C. Further dilutions should be made in appropriate buffered solutions.

Storage

For long term storage, the product should be stored at lyophilized state at -20°C or lower. Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

-20°C to -70°C for 12 months in lyophilized state;

-70°C for 3 months under sterile conditions after reconstitution.



SDS-PAGE



Human IL-15, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.