Growth Factor Data Sheet

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Human interleukin-15 (IL15) is expressed by the IL15 gene located on chromosome 4. It shares approximately 97% and 73% sequence identity with simian and murine IL15, respectively. Both human IL15 and simian IL15 are active on murine cells. IL15 is secreted by mononuclear phagocytes, especially macrophages following infection by virus. It possesses a variety of biological functions that include the stimulation and maintenance of cellular immune responses, specifically the responses which regulate natural killer (NK) cell and T-cell activation and proliferation. In addition, IL15 shares many biological properties with IL2, including T, B and NK cell-stimulatory activities. IL15 signals through a complex composed of IL2/IL15 receptor beta chain. Although IL15 lacks sequence homology with IL2, it has been shown that both the beta and gamma chains of the IL2 receptor are utilized for IL15 binding and signaling. In addition, an IL15 specific binding protein has been cloned from a mouse T-cell clone.

Catalog Number **Product Name**	**1110-15** **IL15, Human** Recombinant Human Interleukin-15 IL-15 Interleukin 15
Source	*Escherichia coli*
MW	~12.9 kDa (114 amino acids)
Sequence	NWVNVISDLK KIEDLIQSMH IDATLYTESD VHPSCKVTAM KCFLLELQVI SLESGDASIH DTVENLIILA NNSLSSNGNV TESGCKECEE LEEKNIKEFL QSFVHIVQMF INTS
Accession Number	P40933
Purity	>97% by SDS-PAGE and HPLC analyses.
Biological Activity	Fully biologically active when compared to standard. The ED_{50} as determined by a cell proliferation assay using murine CTLL-2 cells is less than 0.5 ng/ml, corresponding to a specific activity of $>2.0 \times 10^6$ IU/mg.
Formulation	Sterile filtered white lyophilized powder.
Storage/Handling	This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage. The reconstituted sample can be apportioned into working aliquots and stored at -80 °C for up to 6 months. Avoid repeated freeze/thaw cycles.
Reconstitution	The sample should be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in a siliconized tube using PBS that contains a 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Reconstituted solutions are stable for up to one week at 2-8°C. Stock solutions should be aliquoted and stored at -80°C. Further dilutions should be made in appropriate buffered solutions containing BSA or serum.