



Product Datasheet

Product Name	Interleukin-15 Rat Recombinant
Cata No	CB500247
Source	<i>Escherichia Coli.</i>
Synonyms	IL-15, MGC9721.

Description

The protein encoded by this gene is a cytokine that regulates T and natural killer cell activation and proliferation. This cytokine and interleukine 2 share many biological activities. They are found to bind common hematopoietin receptor subunits, and may compete for the same receptor, and thus negatively regulate each other's activity. The number of CD8+ memory cells is shown to be controlled by a balance between this cytokine and IL2. This cytokine induces the activation of JAK kinases, as well as the phosphorylation and activation of transcription activators STAT3, STAT5, and STAT6. Studies of the mouse counterpart suggested that this cytokine may increase the expression of apoptosis inhibitor BCL2L1/BCL-x(L), possibly through the transcription activation activity of STAT6, and thus prevent apoptosis. Two alternatively spliced transcript variants of this gene encoding the same protein have been reported.

Interleukin-15 Rat Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 115 amino acids and having a molecular mass of 13533 Dalton.

The IL-15 is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried)

powder.

Biological Activity

The ED50 as determined by the dose-dependant stimulation of the proliferation of CTLL-2 was found to be < 10 ng/ml, corresponding to a Specific Activity of 1×10^5 IU/mg.

Purity

Greater than 98.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

Formulation

The protein was lyophilized from 10mM Tris, pH-8.5.

Stability

Lyophilized Interleukin-15 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IL15 should be stored at 4°C between 2-7 days and for future use below -18°C.

For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Please prevent freeze-thaw cycles.

Sequence

The sequence of the first five N-terminal amino acids was determined and was found to be Met-Asn-Trp-Ile-Asp.

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