## Recombinant Equine Interleukin-15 (req IL-15)

Synonyms: none

**Introduction**: IL-15 regulates T and natural killer cell activation and proliferation. IL-15 and IL-2 share many biological activities. They are found to bind common hematopoietin receptor subunits, 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 IL-15 and IL-2. IL-15 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 IL-15 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.

**Description:** Recombinant equine IL-15 produced in *E.Coli* is a single, non-glycosylated polypeptide chain containing 115 amino acids and having a molecular mass of 13146 Dalton. req IL-15 is purified by proprietary chromatographic techniques.

Source: Escherichia Coli.

**Physical Appearance:** Sterile filtered white lyophilized (freeze-dried) powder.

Formulation: lyophilized from a 0.22 µm filtered solution in 25 mM sodium phosphate + 0.1 NaCl, pH 7.0.

**Solubility:** It is recommended to reconstitute the lyophilized req IL-15 in sterile  $H_2O$  not less than 100  $\mu$ g/ml, which can then be further diluted to other aqueous solutions.

**Stability:** Lyophilized req IL-15 although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution req IL-15 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.

Purity: 95.0% as determined by SDS-PAGE Silver Stained gel.

**Amino acid sequence:** The sequence of the first five N-terminal amino acids was determined and was found to be Met-Asn-Trp-Glu-Asp.

Biological Activity: testing in progress

Endotoxicity: The endotoxin level is less than 1ng /µg (IEU/µg) determined by LAL method

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small	2 μg	Cat.N°	18340152
medium	10 µg	Cat.N°	18340153
large	50 µg	Cat.N°	18450155