

Recombinant Mouse IL-15 (carrier-free)

Catalog # / Size: 566301 / 2 µg
566302 / 10 µg
566304 / 100 µg

Source: Mouse IL-15, amino acids Asn49-Ser162 (Accession # NM_008357) was expressed in *E. coli*.

Molecular Mass: The 115 amino acid N-terminal methionylated recombinant protein has a predicted molecular mass of 13,382 Da.

Purity: Purity is >95%, as determined by Coomassie stained SDS-PAGE.

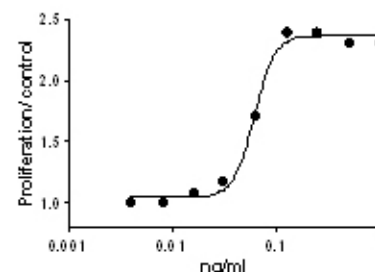
Endotoxin Level: Less than 0.01 ng per µg cytokine as determined by the LAL method.

Activity: ED₅₀=2.5 - 7.5 ng/ml, corresponding to a specific activity of 4 - 1.3 x 10⁵ units/mg, as determined by the dose dependent stimulation of CTLL-2 cell proliferation.

Preparation: For maximum results, quick spin vial prior to opening. Stock solutions should be prepared at no less than 10 µg/mL in sterile buffer containing carrier protein such as 1% BSA or HSA or 10% FBS.

Formulation: Lyophilized from a concentrated solution (1 mg/ml) with 10 mM NaH₂PO₄, 150 mM NaCl, pH 8.0.

Storage: Unopened vial can be stored from -20°C to -70°C for 12 months. Reconstituted protein can be stored for one month at 4°C or up to three months from -20°C to -70°C. **Avoid repeated freeze/thaw cycles.**



CTLL-2 cell proliferation induced by mouse IL-15

Applications:

Applications: Bioassay

Application Notes: This IL-15 protein is biologically active and can be used for in vitro assays.

Description: IL-15 was discovered in the supernatant of Simian kidney epithelial cell line CV-1/EBNA, as a soluble factor capable of supporting proliferation of the IL-2-dependent cell line, CTLL-2. IL-15 is a regulatory cytokine, and it is produced by dendritic cells, epithelial cells, fibroblasts, and monocytes. IL-15 plays an important role in immune response and shares many functions with IL-2. For example, it stimulates the proliferation of activated T cells, NK cells, and B cells, and induces immunoglobulin synthesis by B cells stimulated by anti-IgM or CD40 ligand. In addition, IL-15 promotes the development of dendritic cells and induces the production of proinflammatory cytokines from macrophages. IL-15 acts as a bridge between innate and adaptive immunity because of its diverse roles in the immune system. IL-15 binds to heterotrimeric receptors composed of IL-15R α , IL-15R β , and IL-15R γ c. IL-15 shares the receptor chains β and γ c with IL-2. IL-15 is normally not secreted in soluble form but is instead held on the cell surface bound to a unique receptor, IL-15R α , especially on dendritic cells. Cell-bound IL-15 is then presented in trans form to T cells and NK cells and is recognized by the γ c receptor on these cells; such recognition maintains cell survival and intermittent proliferation.

- Antigen References:**
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