

## Recombinant Rat Interleukin-IL-2 (rr IL-2)

**Synonyms:** T-cell growth factor (TCGF), Aldesleukin, Lymphokine.

**Introduction:** IL-2 is a secreted cytokine that is important for the proliferation of T and B lymphocytes. The receptor of this cytokine is a heterotrimeric protein complex whose gamma chain is also shared by Interleukin 4 and Interleukin 7. The expression of this gene in mature thymocytes is monoallelic that represents an unusual regulatory mode for controlling the precise expression of a single gene. The targeted disruption of a similar gene in mice leads to ulcerative colitis-like disease that suggests an essential role of this gene in the immune response to antigenic stimuli.

**Description:** Recombinant rat IL-2 produced in *E. coli* is a single, non-glycosylated polypeptide chain containing 134 amino acids and having a molecular mass of 17 kDa. The rr IL-2 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 PBS pH 7.3, The aliquotes of 1µg contain Trehalose 5% (w/vol) for better recovery

**Solubility:** It is recommended to reconstitute the lyophilized rr IL-2 in sterile water not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

**Stability:** Lyophilized rr IL-2 although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution rr IL-2 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:** Greater than 95.0% as determined by SDS-PAGE.

**Endotoxin:** The endotoxin level is less than 1 EU / µg determined by LAL method

**Amino Acid Sequence:** PTSSSTSSST AEAQQQQQQQ QQQQHHLEQL LMDLQELLSR MENYRNLKLP RMLTFKFYLP KQATELKDQL CLEDELGPLR HVLDLTQSKS FQLEDAENFI SNIRVTVVKL GSDNTFECQ FDDESATVVD FLRRWIAFCQ SIISTSPQ

**Biological Activity:** Determined by dose dependent stimulation of proliferation of CTLL-2 cell line the rm IL-2 has a biological activity of 5x10<sup>6</sup> IU/mg.

This material is offered for **research only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<i>small</i>	5 µg	Cat.N°	13340020
<i>medium</i>	20 µg	Cat.N°	13340024
<i>large</i>	100 µg	Cat.N°	13340026
<i>x-large</i>	500 µg	Cat.N°	13340027
<i>xx-large</i>	1000 µg	Cat.N°	13340028

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