

Recombinant Murine Interleukin-2 (rm 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 (IL-4) and Interleukin 7 (IL-7). The expression of this gene in mature thymocytes is monoallelic, which 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 which suggests an essential role of this gene in the immune response to antigenic stimuli.

Description: Recombinant murine IL-2 produced in *E. coli* is a single, non-glycosylated polypeptide chain containing 149 amino acids and having a molecular mass of 17.2 kDa. The rm IL-2 is purified by proprietary chromatographic techniques.

Source: *Escherichia coli*.

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

Formulation: Lyophilised from a 0.22 µm filtered solution in PBS pH 7.3. The aliquots of 1 µg contain Trehalose 5% (w/vol) for better recovery

Solubility: After spinning down it is recommended to reconstitute the lyophilized rm IL-2 in sterile H₂O not less than 100 µg/ml which can then be further diluted to other aqueous solutions..

Stability: Lyophilized rm IL-2 although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution rm 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.

Endotoxicity: The endotoxin level is less than 1 EU / µg determined by LAL method.

Amino Acid Sequence: PTSSSTSSST AEAQQQQQQQ QQQQHLLEQL LMDLQELLSR MENYRNLKLP RMLTFKFYLP KQATELKDQL CLEDELGPLR HVLDLTQSKS FQLEDAENFI SNIRVTVVKL KGSDNTFECQ FDDESATVVD FLRRWIAFCQ SIISTSPQ

Biological Activity: Determined by the dose-dependant stimulation of murine CTLL-2 cells the biological activity is 5x 10⁶ 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°	12340020
<i>medium</i>	20 µg	Cat.N°	12340024
<i>large</i>	100 µg	Cat.N°	12340026
<i>x-large</i>	500 µg	Cat.N°	12340027
<i>xx-large</i>	1000 µg	Cat.N°	12340028

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