

Recombinant Rat Interleukin-2, Liquid

#R00300

Size: 5 µg/100 µg/500 µg

Stability & Storage

Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 6 months from date of receipt, -20 to -70 °C as supplied.
- 3 months, -20 to -70 °C under sterile conditions after opening.



Warning: This product is intended for scientific research only. It is not to be used for medical or diagnostic procedures in humans or animals, nor as a food, cosmetic, or household product.

Background

IL-2 is a powerful immunoregulatory lymphokine produced by T-cells in response to antigenic or mitogenic stimulation. It is expressed by CD4+ and CD8+ T cells, γδ T cells, B cells, dendritic cells, and eosinophils. IL-2/IL-2R signaling is required for T-cell proliferation and other fundamental functions which are essential for the immune response. The receptor for IL-2 consists of three subunits (55 kDa IL2Rα, 75 kDa IL2Rβ, 64 kDa common gamma chain γc/IL2Rγ) that are present on the cell surface in varying preformed complexes. Recombinant rat IL-2 is a 15.3 kDa protein containing 134 amino acid residues and it shares about 82 %, 66 %, 66 %, 60 % and 54 % amino acid sequence identity with mouse, human, rhesus macaque, pig and equus caballus IL-2, respectively.

AA Sequence

APTSSPAKETQQHLEQLLLDLQVLLRGIDNYKNLKL

MMLTFKFYLPKQATELKHLCLENELGALQRVLDLTQ
SKSFHLEDAGNFISNIRVTVVKLKGSENKFECQFDDE
PATVVEFLRRWIAICQSIISTMTQ

Product Specification

Synonyms	T-cell Growth Factor, CGF
Accession	P17108
GeneID	116562
Species	Rat
Source	Escherichia coli.
Molecular Weight	Approximately 15.5 kDa, a single non-glycosylated polypeptide chain containing 135 amino acids.
Purity	> 97 % by SDS-PAGE and HPLC analyses.
Biological Activity	Fully biologically active when compared to standard. The ED ₅₀ as determined by a cell proliferation assay using murine CTLL-2 cells is less than 0.2 ng/ml, corresponding to a specific activity of > 5.0 × 10 ⁶

	IU/mg.
Physical Appearance	Sterile Colorless liquid.
Formulation	A 0.2 µm filtered concentrated sterile solution in 10 mM sodium citrate, pH 4.0, 30 % glycerol.
Endotoxin	Less than 1 EU/µg of rRtIL-2, Liquid as determined by LAL method.