

BACKGROUND:

Interleukin 2 (IL-2) is an immunomodulatory cytokine that is produced by lymphocytes. IL-2 signals through the IL-2R receptor to induce activated T cell proliferation and promote T cell differentiation. IL-2 also stimulates the proliferation and differentiation of B cells, natural killer cells, monocytes, and macrophages.

Recombinant Rat Interleukin-2 is a non-glycosylated protein monomer, containing 136 amino acids and having a molecular mass of 15.6 kDa.

Cat. No.:
RP3038AF

Alternate Names:
T cell growth factor, TCGF, Aldesleukin

AA Sequence:

MAPTSSPAKE	TQQHLEQLL	DLQVLLRGID
NYKNLKLPM	LTFKFYLPKQ	ATELKHLQCL
ENELGALQRV	LDLTQSKSFH	LEDAGNFISN
IRVTVVKLLG	SENKFECQFD	DEPATVVEFL
RRWIAICQSI	ISTMTQ	

TECHNICAL INFO

Source:
E. coli

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

Formulation:
0.1% Trifluoroacetic Acid (TFA)

Stability:
Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

Reconstitution:
Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product at 0.1 mg/ml in sterile 10 mM HCl, which can be further diluted into other aqueous solutions.

Protein Content and Purity determined by:

- UV spectroscopy at 280 nm.
- RP-HPLC calibrated against a known standard.
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

Endotoxin Level:
Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

Biological Activity:
The activity is measured by dose-dependent CTLL-2 cell proliferation, with Bioactivity Acceptance Criteria ED50 at 2 ng/mL.

Animal Component-Free
This product is produced with no animal derived raw products. All processing and handling employs animal free equipment and animal free protocols.

