PRODUCT INFORMATION

Expression system E.coli

Domain 22-153aa

UniProt No. P60568

NCBI Accession No. NP_000577.2

Alternative Names IL-2, TCGF, Aldesleukin, T-cell growth factor, Interleukin-2

PRODUCT SPECIFICATION

Molecular Weight 15.4 kDa (133aa) confirmed by MALDI-TOF

Concentration 0.5mg/ml (determined by Bradford assay)

Formulation Liquid in. Phosphate-Buffered Saline (pH 7.4)

Purity > 95% by SDS-PAGE

Endotoxin level < 1 EU per 1ug of protein (determined by LAL method)

Biological Activity

Measured in a cell proliferation assay using CTLL2 mouse cytotoxic T cells. The ED50 range \leq 0.65ng/ml.

Tag Non-Tagged

Application SDS-PAGE, Bioactivity

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

IL-2, also known as T cell growth factor (TCGF), is an immunoregulatory lymphokine produced by T-cells in



response to antigenic or mitogenic stimulation. IL-2/IL-2R signaling is required for T-cell proliferation and other fundamental functions which are essential for the immune response. IL-2 stimulates growth and differentiation of B-cells, NK cells, lymphokine activated killer cells, monocytes, macrophages and oligodendrocytes. This recombinant human IL-2 is a 15. 4 kDa protein, containing 133 amino acid residues including one intra chain disulfide bond. Recombinant human IL-2 was overexpressed in E. coli and purified by conventional chromatography, after refolding of the isolated inclusion bodies in a renaturation buffer.

Amino acid Sequence

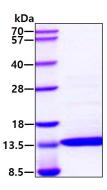
MPTSSSTKKT QLQLEHLLLD LQMILNGINN YKNPKLTRML TFKFYMPKKA TELKHLQCLE EELKPLEEVL NLAQSKNFHL RPRDLISNIN VIVLELKGSE TTFMCEYADE TATIVEFLNR WITFSQSIIS TLT

General References

Morgan DA., et al. (1976). Science, 193. 1007-8. Watson J., et al. (1980). Immunol Rev, 51. 257-78. Taniguchi T., et al. (1983). Nature, 302. 305-10.

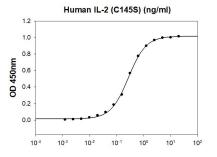
DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

Biological Activity



Human IL-2 (C145S) stimulates cell proliferation of the CTLL2 mouse cytotoxic T cells. The ED50 range ≤ 0.65 ng/ml.