# **PRODUCT INFORMATION**

**Expression system** E.coli

**Domain** 21-155aa

**UniProt No.** Q29416

NCBI Accession No. NP\_001003305

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

# **PRODUCT SPECIFICATION**

Molecular Weight 18.1 kDa (160aa) 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 CTLL-2 mouse cytotoxic T cells. The ED50 range  $\leq$  0.3ng/ml.

#### **Tag** His-Tag

**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

IL2, also known as Interleukin2, is an immunoregulatory lymphokine produced by T-cell in response to antigenic

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or mitogenic stimulation IL2/IL-2R signaling is required for T-cell proliferation and other fundamental functions which are essential for the immune response. IL2 stimulates growth and differentiation of B-cells, NK cells, lymphokine activated kill cells, monocytres, macrophages and oligodendrocytes. Recombinant canine IL2 protein was expressed in E. coli and purified by using conventional chromatography techniques.

#### Amino acid Sequence

<MGSSHHHHHH SSGLVPRGSH MGSHM>APITS SSTKETEQQM EQLLLDLQLL LNGVNNYENP QLSRMLTFKF YTPKKATEFT HLQCLAEELK NLEEVLGLPQ SKNVHLTDTK ELISNMNVTL LKLKGSETSY NCEYDDETAT ITEFLNKWIT FSQSIFSTLT

#### **General References**

Nedoszytko B., et al. (2016) Postepy Dermatol Alerqol. 33(6): 429-434. Michael HT., et al. (2013) Vet Immunol Immunopathol. 155(3): 211-7.

## DATA

#### **SDS-PAGE**



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

## **Biological Activity**



Canine IL-2 stimulates cell cytotoxicity in the CTLL-2 mouse cytotoxic T cell. The ED50 range  $\leq$  0.3ng/ml.

