# **PRODUCT INFORMATION**

**Expression system** E.coli

**Domain** 21-154aa

**UniProt No.** Q07885

NCBI Accession No. NP\_001036802

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

# **PRODUCT SPECIFICATION**

Molecular Weight 17.8 kDa (157aa) Confirmed by MALDI-TOF

**Concentration** 0.25mg/ml (determined by BCA assay)

## **Formulation** Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.15M NaCl, 30% glycerol

**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 $\leq 0.3$ ng/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



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, monocytes, macrophages and oligodendrocytes. Recombinant feline IL2 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

#### **Amino acid Sequence**

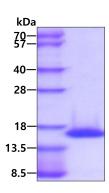
<MGSSHHHHHH SSGLVPRGSH MGS>APASSST KETQQQLEQL LLDLRLLLNG VNNPENPKLS RMLTFKFYVP KKATELTHLQ CLVEELKPLE EVLYLAQSKN FHLNHIKELM SNINVTVLKL KGSETRFTCN YDDETATIVE FLNKWITFCQ SIFSTLT

#### **General References**

Taniguchi T., et al. (1983). Nature. 302(5906): 305-10 Nedoszytko B., et al. (2016) Postepy Dermatol Alergol. 33(6): 429-434

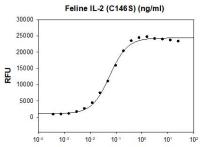
## DATA

#### **SDS-PAGE**



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

**Biological Activity** 



Feline IL-2 (C146S) stimulates cell proliferation of the CTLL2 mouse cytotoxic T cells. The ED50 range  $\leq$ 0.3 ng/ml.