

Resource Summary Report

Generated by [NIF](#) on Jul 29, 2026

pQE80L-IL2 C125S

RRID:Addgene_104348

Type: Plasmid

Proper Citation

RRID:Addgene_104348

Plasmid Information

URL: <http://www.addgene.org/104348>

Proper Citation: RRID:Addgene_104348

Insert Name: Human IL-2 (C125S)

Organism: Homo sapiens

Bacterial Resistance: Ampicillin

Vector Backbone Description: Backbone Marker:qlAGEN; Backbone Size:4751; Vector Backbone:pQE80L; Vector Types:Bacterial Expression; Bacterial Resistance:Ampicillin

Comments: Like the FDA approved Proleukin (Aldesleukin), the sequence contains a C125S mutation (TGT -> TCC) to prevent cysteine mispairing in E. coli, but this does not affect biological activity (Wang et al. 1984) Expression and inclusion body preparation was carried out essentially as described in Carmenate et al. (2013), except that the 6M guanidine solubilised IL-2 was applied directly to an NTA column at 1 column volume / minute. LPS was removed with 0.1% Triton X114 / TE washes following by on-column re-folding with TE buffer. NTA-purified His-IL-2 exhibited identical activity to commercially sourced (tag-free) IL-2 (Peprotech). References: Wang A, Lu SD, and Mark DF. Site-specific mutagenesis of the human interleukin-2 gene: structure-function analysis of the cysteine residues. Science 1984; 224:1431-1433. Carmenate T, Pacios A, Enamorado M, Moreno E, Garcia-Martinez K, Fuente D, and Leon K. Human IL-2 mutein with higher antitumor efficacy than wild type IL-2. J. Immunol. 2013; 190:6230-6238.

Plasmid Name: pQE80L-IL2 C125S

Relevant Mutation: C125S mutation (TGT -> TCC)

Record Creation Time: 20220422T221506+0000

Record Last Update: 20260725T073406+0000

Ratings and Alerts

No rating or validation information has been found for pQE80L-IL2 C125S.

No alerts have been found for pQE80L-IL2 C125S.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We have not found any literature mentions for this resource.