

## Recombinant human IL-2 protein (Qk089)



**Type:** Stem cells

**Available for purchase:** Unit Size (µg): 25, 50, 100, 500, 1000

Buy online with secure credit card or purchase order.

[View this product and buy online](#)

### Product Information

---

Interleukin-2 (IL-2) is a vital cytokine that regulates immune responses by promoting the growth and activation of T-cells, enhancing immune function, and maintaining immune tolerance for immune activation and suppression.

Qkine has optimized the IL-2 manufacture process to produce a highly bioactive protein with excellent lot-to-lot consistency for enhanced experimental reproducibility. Qkine IL-2 is a highly pure 15.5 kDa monomer, [animal origin-free](#) (AOF) and carrier-protein-free (CF).

**Qkine IL-2 is also available as [cell therapy grade](#) with extended quality testing and documentation - [Qk089-CTG](#)**

#### Alternative protein names

Interleukin-2, T-cell growth factor (TCGF), IL2, IL 2, Qk89

#### Molecular weight

15.5 kDa (monomer)

#### Protein Uniprot number

Highly pure human IL-2 protein (UniProt number: P60568)

#### Species reactivity

- human

- species similarity:
- mouse - 56%
- rat - 57%
- bovine - 71%
- porcine - 69%

### **Product Information**

- >98%, by SDS-PAGE quantitative densitometry
- Expressed in *E. coli*
- Animal origin-free (AOF) and carrier protein-free
- Manufactured in our Cambridge, UK laboratories
- Lyophilized from acetonitrile, TFA

### **Reconstitution instructions**

- Resuspend in sterile-filtered water at >50 µg/ml

### **Featured applications**

- Activation of T-cells and natural killer (NK) cells
- Differentiation of T-cells
- Development and maintenance of regulatory T-cells (Tregs)
- Promotion of the expansion of effector T-cells

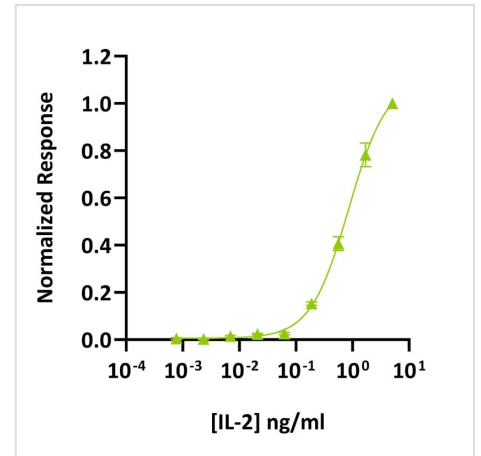
### **Further quality assays**

- Mass spectrometry: single species with expected mass
- Recovery from stock vial: >95%
- Endotoxin: <0.05 EU/µg protein

## Scientific Information

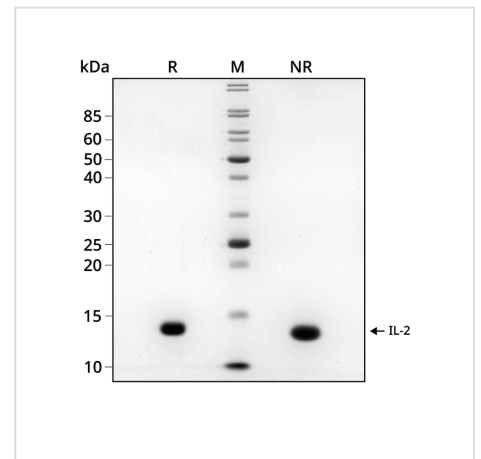
### Bioactivity

Recombinant IL-2 activity was determined using a SRE luciferase reporter assay in transiently transfected HEK293 cells co-transfected with the IL-2 receptors (IL-2R $\beta$  and IL-2R $\gamma$ ). Transfected cells were treated in triplicate with a serial dilution of IL-2 for 3 hours. Firefly activity was measured and normalized to the control Renilla luciferase activity. Data from Qk089 lot #204686. EC50 = 0.86 ng/ml (55 pM).



### Purity

Recombinant IL-2 migrates at approximately 15.5 kDa (monomer) in reduced (R) and non-reduced (NR) conditions. No contaminating protein bands are present. The purified recombinant protein (3  $\mu$ g) was resolved using 15% w/v SDS-PAGE in reduced (+ $\beta$ -mercaptoethanol, R) and non-reduced (NR) conditions and stained with Coomassie Brilliant Blue R250. Data from Qk089 lot #204686.



Original product page: <https://qkine.com/product/recombinant-human-il-2-protein-qk089/>

PDF generated: 8 May 2026

Copyright © 2026 by Qkine Ltd. All rights reserved including graphics and images.