

## Recombinant human TGF- $\beta$ 2 protein (Qk072)



**Type:** Stem cells

**Available for purchase:** Unit Size ( $\mu$ g): 25, 50, 100, 500, 1000

Buy online with secure credit card or purchase order.

[View this product and buy online](#)

### Product Information

---

Transforming Growth Factor beta 2 (TGF- $\beta$ 2), part of the [TGF- \$\beta\$  superfamily](#), regulates a wide array of cellular processes, including proliferation, differentiation, wound healing, apoptosis, metabolism, embryogenesis, and tissue repair. It is an essential growth factor in many embryonic and [induced pluripotent stem cell](#) culture media.

TGF- $\beta$ 2 is a high purity protein with a molecular weight of 25.4 kDa. This protein is carrier-free and tag-free to ensure its purity with exceptional lot-to-lot consistency. Qkine TGF- $\beta$ 2 is suitable for the culture of reproducible and high-quality stem cells and other relevant cells.

**This protein is also available as GMP compliant [Cell Therapy Grade](#), to enquire email [support@qkine.com](mailto:support@qkine.com).**

#### Alternative protein names

Transforming growth factor-beta 2, Transforming growth factor beta-2, TGF-beta 2, TGF $\beta$ 2, TGFB2, TGF-B2, TGF B2, Cetermin, Glioblastoma-derived T-cell suppressor factor, G-TSF, MGC116892, BSC-1, BSC-1 cell growth inhibitor, Polyergin, Qk72

#### Molecular weight

25.4 kDa (dimer)

#### Protein Uniprot number

High purity human TGF- $\beta$ 2 protein (UniProt: P61812)

#### Species reactivity

- human
- species similarity:
- mouse - 97%
- rat - 97%
- bovine - 100%
- porcine - 100%

### **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 10 mM HCl (Reconstitution solution A) at >50 µg/ml

### **Featured applications**

- Stem cell expansion and maintenance
- Epithelial to mesenchymal transition
- Stimulation of protein expression and secretion

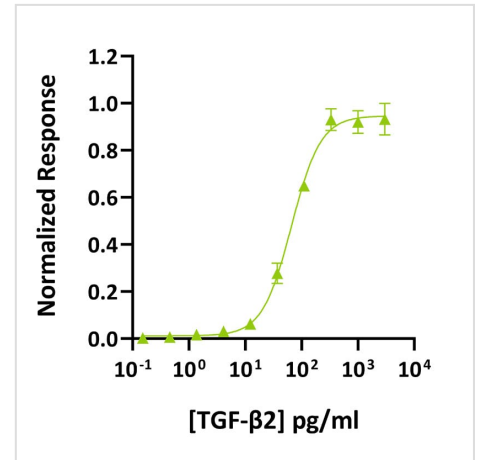
### **Further quality assays**

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

# Scientific Information

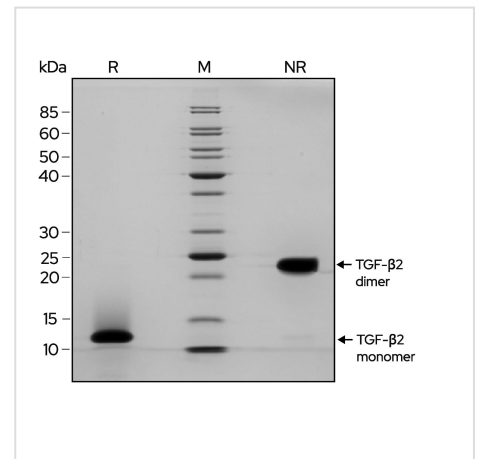
## Bioactivity

TGF- $\beta$ 2 activity was determined using the TGF- $\beta$ 2-responsive firefly luciferase reporter assay. Transfected HEK293T cells were treated in triplicate with a serial dilution of TGF- $\beta$ 2 for 6 hours. Firefly luciferase activity was measured and normalised to the control Renilla luciferase activity. Data from Qk072 lot #204596. EC50 = 66 pg/ml (2.6 pM)



## Purity

Recombinant TGF- $\beta$ 2 migrates as a major band at approximately 25 kDa (dimer) in non-reducing (NR) conditions. Upon reduction (R), only the monomer band at approximately 12.5 kDa is visible. 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 Qk072 lot #204596.



**Original product page:** <https://qkine.com/product/recombinant-human-tgf-b2-protein-qk072/>

**PDF generated:** 12 May 2026

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