orders@qkine.com
support@qkine.com

Recombinant human TPO protein (Qk098-CTG)



Type: Cell Therapy Grade

Available for purchase: unit size (µg): 500, 1000

Buy online with secure credit card or purchase order.
View this product and buy online

Product Information

Thrombopoietin (TPO) is a cytokine which stimulates the production and differentiation of megakaryocytes, regulating platelet production. Recombinant TPO can be used to support the self-renewal and maintenance of hematopoietic stem cells.

Qkine TPO is a 16 kDa protein, animal origin-free, tag-free and carrier-free it has been manufactured to be highly pure and bioactive for reproducible hematopoietic stem cell culture.

Qkine cell therapy grade high purity animal origin-free proteins are manufactured as GMP grade equivalents in an ISO 9001:2015-certified facility, under ISO 20399:2022 standards with GMP compliance, defined quality criteria and documentation.

This product is available to order now and will be in stock soon, please contact us for the estimated lead time customerservice@qkine.com

Alternative protein names

Thyroid Peroxidase, TPX, Thyroid Microsomal Antigen, Thyroperoxidase, TDH2A, MPL ligand, megakaryocyte colony-stimulating factor, GMP TPO

Molecular weight

16 kDa (monomer)

Protein Uniprot number

High purity human protein (Uniprot: P07202)

Species reactivity

- human
- species similarity:
- mouse - 92%
- rat - 91%
- bovine - 85%
- porcine - 91%

Product Information

- Certified animal origin-free (AOF)
- Cell and gene therapy grade
- Manufactured in our ISO 9001:2015 facility in Cambridge, UK
- Lot-to-lot consistency in bioactivity
- Full traceability and documentation
- Carrier protein-free, tag free
- Expressed in *E. coli*
- Lyophilized from acetonitrile, TFA

Reconstitution instructions

- Resuspend in 10 mM HCl (Reconstitution solution A) at >50 µg/ml

Featured applications

- Immune cell therapy expansion

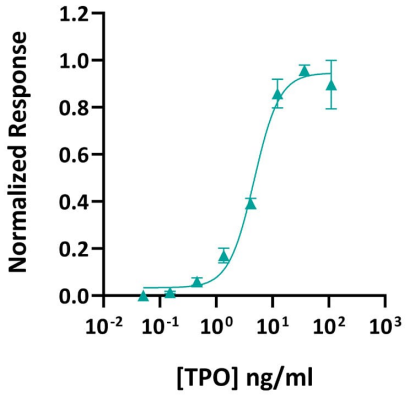
Further quality assays

- Mass spectrometry: single species with expected mass
- Purity >98%, by SDS-PAGE quantitative densitometry
- Recovery from stock vial: >95%
- Sterility tested and mycoplasma negative
- Endotoxin: <0.05 EU/µg protein
- Residual host cell protein <10 ng/µg
- Residual host cell DNA <10 ng/µg
- N-terminal sequence analysis

Scientific Information

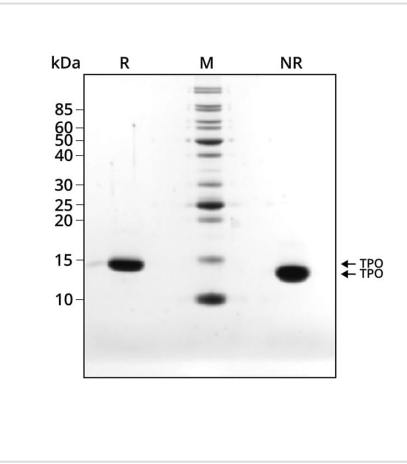
Bioactivity

Recombinant TPO activity was determined using a Promega serum response element luciferase reporter assay in HEK293T cells co-transfected with TPOR. Cells were treated in triplicate with a serial dilution of TPO for 3 hours. Firefly activity was measured and normalized to the control Renilla luciferase activity. Data from Qk098 lot 204752. EC50 = 4.72 ng/ml (0.30 nM).



Purity

Recombinant TPO migrates at approximately 14 kDa (monomer) in reduced (R) and non-reduced (NR) conditions. No contaminating protein bands are present. The purified recombinant protein (3 µg) was resolved using 15% w/v SDS-PAGE in reduced (+β-mercaptoethanol, R) and non-reduced (NR) conditions and stained with Coomassie Brilliant Blue R250. Data from Qk098 lot #204752.



Original product page: https://qkine.com/product/recombinant-human-tpo-protein-qk098-ctg/

PDF generated: 13 October 2026

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