

Recombinant bovine/porcine FGF2-G3 (145 aa) protein (Qk080)



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

Recombinant bovine/porcine FGF2-G3 protein is a [thermostable engineered form of FGF-2](#) (bFGF). Qk080 is the thermostable form of the wild-type [FGF-2 145 aa \(Qk040\)](#). FGF2-G3 has an increased functional half-life from <10 h (wild-type) to >7 days (FGF2-G3). Bovine FGF2-G3 is used for the development of optimized serum-free culture media for species-specific bovine (cow) and porcine (pork) [cultivated meat](#) and veterinary research applications, including the expansion of bovine and porcine smooth muscle cells, bovine and porcine induced pluripotent, embryonic and [mesenchymal stem cells](#).

Recombinant FGF2-G3 is used in B8 media ([Kuo et al. 2020](#)) and Beefy-9 media ([Stout et al. 2023](#)) for weekend free, high homogeneity induced pluripotent stem cell culture. FGF2-G3 also has applications in chemically defined stem cell and [organoid culture media](#).

Bovine/porcine FGF2-G3 has a molecular weight of 16.3 kDa. This protein is carrier-free and tag-free to ensure purity with exceptional lot-to-lot consistency.

Alternative protein names

Basic fibroblast growth factor, bFGF, FGF-β, FGF2, Fibroblast growth factor-basic, HBGF-2, FGF2-G3, FGF2-STAB, FGF2-STAB3, FGF 2, Qk80

Molecular weight

16.3 kDa (monomer)

Protein Uniprot number

High purity thermostable bovine/porcine FGF2-G3

Species reactivity

- bovine
- porcine

Product Information

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

Reconstitution instructions

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

Featured applications

- Maintenance and expansion of bovine iPSC, ESC and primary cells
- Cellular agriculture and cultivated meat cell culture media optimization

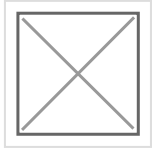
Further quality assays

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

Scientific Information

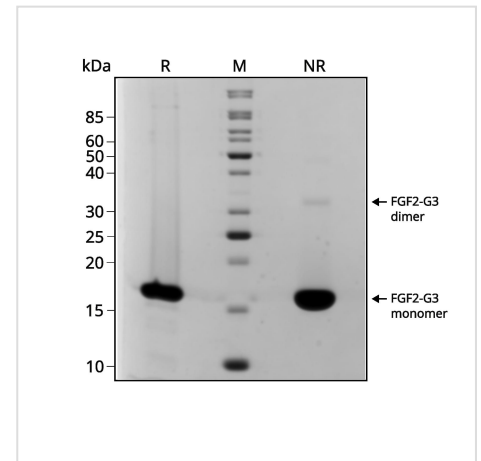
Bioactivity

Recombinant bovine/porcine FGF2-G3 activity was determined using the Promega serum response element luciferase reporter assay in transfected HEK293T cells. EC50 = 217 pg/ml (13 pM). Cells were treated in triplicate with a serial dilution of bovine/porcine FGF2-G3 for 3 hours. Firefly luciferase activity was measured and normalized to the control Renilla luciferase activity. Data from Qk080 lot #204611.



Purity

Recombinant bovine/porcine FGF2-G3 145 aa migrates as a major band at approximately 16 kDa (monomer) in reduced (R) and non-reduced (NR) conditions. The dimeric form is also observed at approximately 32 kDa in the non-reduced condition. No contaminating protein bands are present. The purified recombinant protein (7 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 Qk080 lot #204611.



Original product page: <https://ryan.calliope-alpha.ts.net/product/recombinant-bovine-porcine-fgf2-g3-145-aa-protein-qk080/>

PDF generated: 12 May 2026

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