orders@qkine.com
support@qkine.com

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

Type: Food grade proteins

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) with 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.

Qkine high quality food grade bovine/porcine FGF2-G3 has a molecular weight of 16.3 kDa. This protein is animal origin-free, 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

Molecular weight

16.3 kDa (monomer)

Protein Uniprot number

High purity thermostable bovine/porcine FGF2-G3

Species reactivity

- bovine
- porcine

Product Information

- High quality food grade recombinant protein
- >98%, by SDS-PAGE quantitative densitometry
- Expressed in *E. coli*
- Animal origin-free (AOF) and carrier protein-free
- Manufactured in the UK under a food manufacturing HACCP regime
- 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
- Cellular agriculture process development

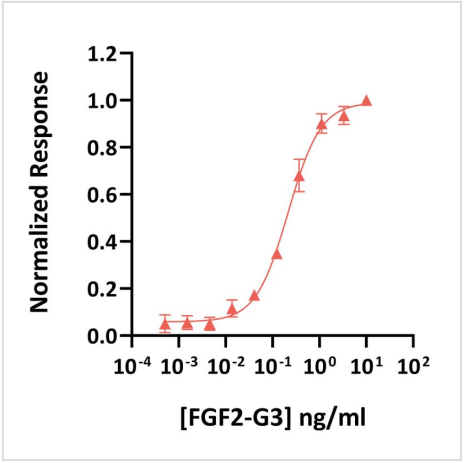
Further quality assays

- Mass spectrometry: single species with expected mass
- Recovery from stock vial: >95%
- Endotoxin: <0.05 EU/µg protein
- Full raw materials traceability, allergen analysis, CoO, CoA, beta-lactam-free and animal origin-free certification available

Scientific Information

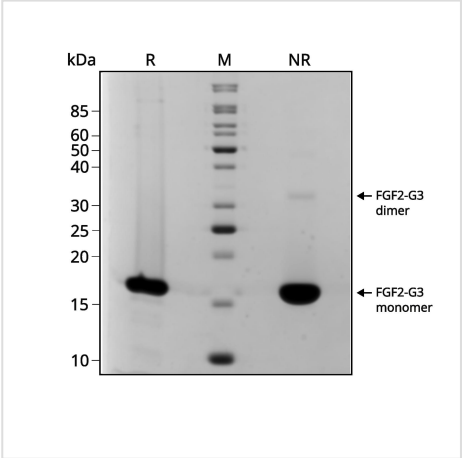
Bioactivity

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.



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.



Original product page: https://qkine.com/product/recombinant-bovine-porcine-fgf2-g3-145-aa-protein-qk080-fg/

PDF generated: 12 May 2026