

Serum-free media optimization growth factor discovery kit (Qk505)



Type: Growth factor discovery kits

Available for purchase: Qk505: Serum-free media optimization kit

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Product Information

For rapid optimization of your media to become entirely serum-free. Serum-free media offers a defined and controlled environment for cell culture, minimizing variability and contamination risks associated with traditional serum-containing media. Serum-free media enhances reproducibility and reliability in experimental results, while aligning with ethical considerations and animal welfare principles. The use of serum-free media also reduces the likelihood of introducing adventitious contaminants, such as viruses and mycoplasma, into cell cultures. Serum-free media is particularly valuable in cellular agriculture and translational and clinical research, ensuring compliance with regulatory standards for safety and quality in cell-based therapies and tissue engineering applications.

The serum-free media optimization growth factor discovery kit contains 7 growth factors which are commonly used in a variety of serum-free media. Use this kit to optimize fully defined media.

Product Information

- Bioactivity Guaranteed
- >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

Reconstitution instructions

- Discovery kits

Featured applications

- Serum-free media development
- Chemically defined 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

FGF2-G3 154 aa - Qk053 - **100 µg**

A thermostable engineered form of FGF-2. FGF2-G3 154 aa is the 154 aa mature domain of FGF-2 (Qk027). The functional half-life has increased from <10 h (wild-type) to >7 days (FGF2-G3).

Human FGF-2 (154 aa) - Qk027 - **50 µg**

A highly bioactive, long-form of human fibroblast growth factor 2 protein. FGF-2 protein is used to support the maintenance of human embryonic stem cells and proliferation and differentiation of induced pluripotent and mesenchymal stem cells.

Activin A - Qk001 - **50 µg**

Regulates embryonic development, cell proliferation, differentiation, and immune responses. Activin A is frequently used to maintain pluripotency in induced pluripotent and embryonic stem cell cultures.

TGF-β1 PLUS - Qk010 - **25 µg**

Regulates various cellular processes, including cell proliferation, growth, differentiation, motility, and apoptosis. It is an essential growth factor in many embryonic and induced pluripotent stem cell maintenance media, including the commonly used E8, StemPro, and mTeSR media.

TGF-β2 - Qk072 - **50 µg**

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.

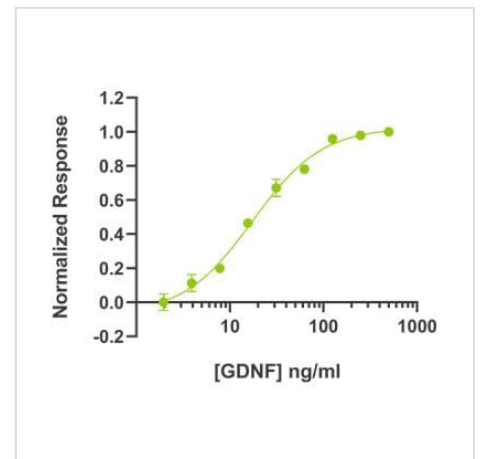
TGF-β3 - Qk054 - **25 µg**

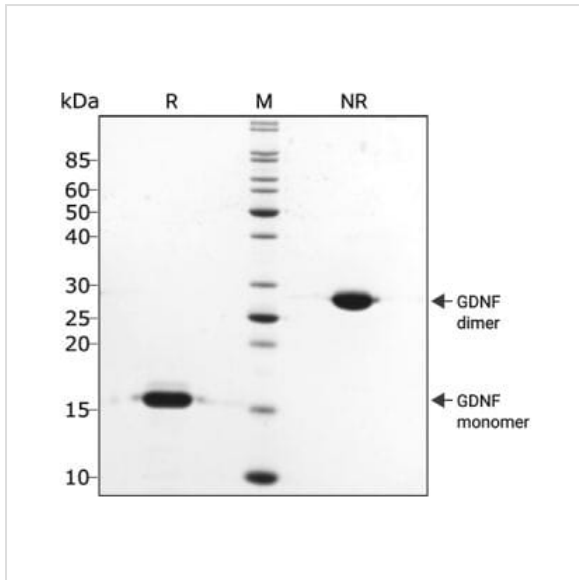
A member of the transforming growth factor family, a family involved in regulating cell survival, proliferation and differentiation. TGF-β3 is used in human pluripotent stem cell maintenance medias, such as B8 media.

IGF-1 LR3 (insulin-like growth factor long arginine 3) - Qk041 - **100 µg**

A synthetic analog of IGF-1. The substitutions include an arginine substitution and an N-terminal protein extension. Consequently, IGF-1 LR3 has improved biological potency and extended half-life.

Purity





Original product page: <https://ryan.calliope-alpha.ts.net/product/serum-free-media-optimization-growth-factor-discovery-kit-qk505/>

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