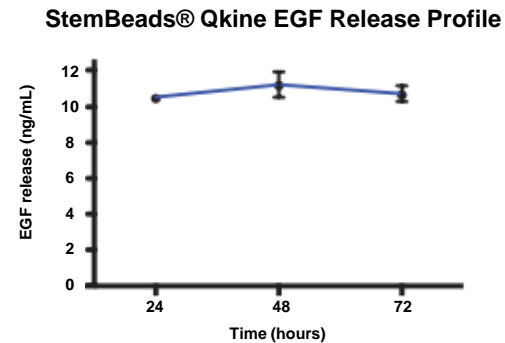


Product Description

StemBeads® Qkine EGF is a patented growth factor supplement that offers a novel way to culture cells with native Endothelial Growth Factor more efficiently, with greater control and fewer medium changes. EGF is key for supporting differentiations. StemBeads® Qkine EGF are microbeads composed of an FDA approved, biodegradable PLGA polymer that is loaded with Qkine recombinant human EGF (Qk011) and release the encapsulated protein at a constant rate. Controlled delivery and stable levels (Figure 1) overcome the half-life of EGF and improve cell cultures while saving researchers valuable time and resources.

StemBeads® Qkine EGF has been tested on neural progenitor cell (NPC) media, including neural progenitor expansion medium (NPEM), with enhanced cellular profiles. StemBeads® Qkine EGF can be used in combination with other StemBeads®, including StemBeads® Qkine FGF2.

Figure 1



Product Information

Catalog #	Product Name	Storage	Expiration	Average Particle Size	Reconstitution
Qk-SBEGF	StemBeads® Qkine EGF	4°C	6 months from manufacture (see label)	50 ± 35 µm diameter	Ready-to-use solution in DMEM/F12

Directions for Use:

Preparation of Media with StemBeads® Qkine EGF

- Mix vial of StemBeads® Qkine EGF thoroughly by vortexing or pipetting prior to use.
- Add 20 µL of StemBeads® Qkine EGF per 1 mL of medium. This will provide cells with stable 10 ng/mL EGF. See back for additional release data.

Culturing with StemBeads® Qkine EGF

- Follow your typical culturing or differentiation protocols.
- In place of using soluble EGF, mix media containing StemBeads® Qkine EGF well and plate into culture dish.
- When needed, remove media from culture dish and wash twice with DMEM. Alternatively, PBS, F12 or basal medium can also be used to wash.
- Change media every 2-3 days depending on cell density and culture conditions.
- Repeat passage and feed as needed.

Note: Washing is highly recommended prior to each feed to remove cell debris and remaining beads.

Release Data

StemBeads® Qkine EGF release in media can be adjusted slightly based on the amount of StemBeads® added or the amount of medium used. We recommend a release of 10 ng/mL, however, to fit other needs, the release can be adjusted slightly. See the chart below for reference.

Volume of StemBeads® Qkine EGF	Volume of Medium Added	EGF Release in Volume of Medium Added
10 µL	1 mL	5 ng/mL
20 µL	1 mL	10 ng/mL
40 µL	1 mL	20 ng/mL
20 µL	0.5 mL	20 ng/mL
20 µL	1 mL	10 ng/mL
20 µL	2 mL	5 ng/mL