

PRODUCT DESCRIPTION

StemBeads® EGF is a patented growth factor supplement that offers a novel way to grow EGF-dependent cell cultures more efficiently, with fewer media changes. StemBeads® EGF are microparticles composed of a FDA approved, biodegradable polymer that is loaded with recombinant human endothelial growth factor (EGF). Under the microscope, the StemBeads® EGF will appear as dark circles that do not harm the cells, and with time, break down to release the encapsulated protein at a constant rate. The stable level of EGF in culture allows for more homogeneous stem cell cultures, while saving researchers valuable time with fewer media changes.

ORDERING INFORMATION

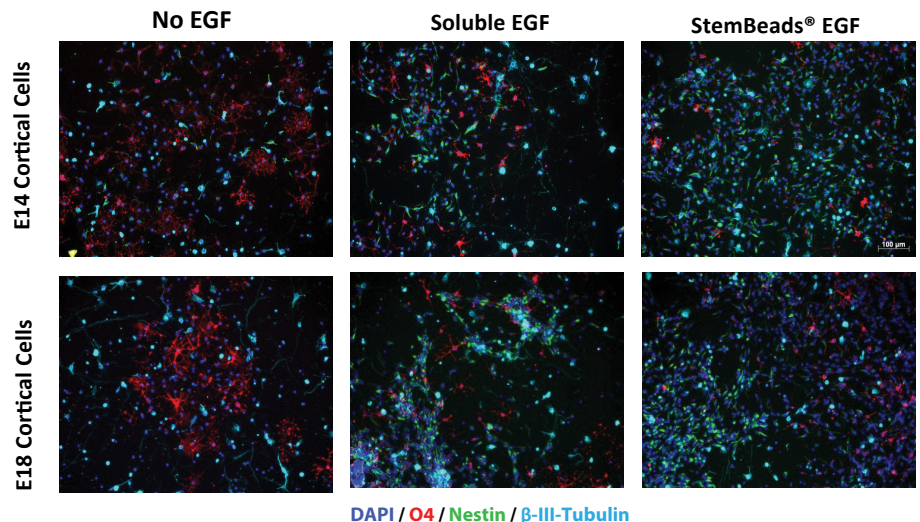
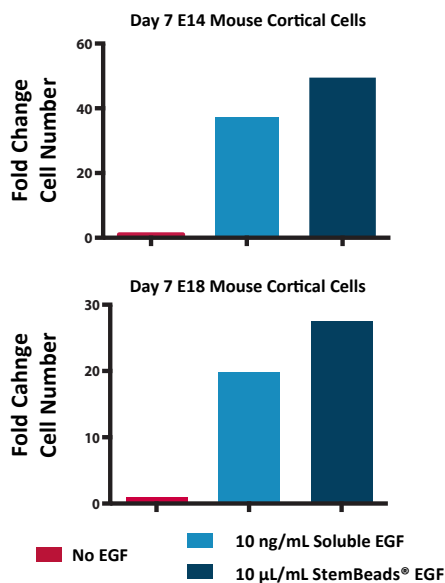
| CATALOG # | PRODUCT NAME | SIZE | RELEASE |
|-----------|----------------|------|---------------------|
| SBEGF | StemBeads® EGF | 3 mL | 20 µL/mL = 10 ng/mL |



PRODUCT SPECIFICATIONS

- Reconstitution & Use:** StemBeads® EGF are provided as a ready-to-use 3 mL solution in DMEM/F12.
- Storage & Stability:** Upon arrival store at 4°C. StemBeads® EGF are stable for up to 6 months when stored at 4°C.
- Release Profile:** 20 µL/mL StemBeads® EGF = 10 ng/mL release of soluble EGF.
- Physical Characteristics:** StemBeads® EGF are 50 ± 35µm in diameter.

APPLICATION DATA



Mouse NSCs grown for one week in media supplemented with StemBeads® EGF show increased progenitor cells (Nestin+) and Neurons (β-Tubulin-III) versus conditions fed with media supplemented with or without soluble EGF.

REFERENCES

1. Lotz S., et al. Sustained Levels of FGF2 Maintain Undifferentiated Stem Cell Cultures with Biweekly Feeding. PLoS ONE 2013, 8(2).

DIRECTIONS FOR USE

- 1) Aliquot desired volume of media.
- 2) Mix vial of StemBeads® EGF thoroughly by vortexing or pipetting prior to use as the StemBeads® EGF will settle quickly.
- 3) Add StemBeads® EGF into aliquot of media at the desired concentration (using a concentration of 20 µL StemBeads® EGF per 1 mL of media will give a 10 ng/mL release of soluble EGF protein).
- 4) Remove media from culture dish and wash twice with DMEM. Alternatively, PBS, F12 or basal medium can also be used to wash.
- 5) Mix media containing StemBeads® EGF well and plate into culture dish.
- 6) Change media every 2-3 days depending on cell density and culture conditions. StemBeads® EGF can also be supplemented into media during passaging and plating of cells. Cells should be passaged as required depending on density and culture method.

FOR RESEARCH USE ONLY. NOT INTENDED FOR HUMAN OR ANIMAL DIAGNOSTIC OR THERAPEUTIC USES.