

### PRODUCT DESCRIPTION

StemBeads® GDNF is a patented growth factor supplement that offers a novel way to grow Glial Cell Line-Derived Neurotrophic Factor - dependent cell cultures more efficiently, with greater control, and with fewer medium changes. StemBeads® GDNF are microparticles composed of an FDA approved, biodegradable polymer that is loaded with recombinant human Glial Cell Line-Derived Neurotrophic Factor. Under the microscope, StemBeads® will appear as dark circles that do not harm the cells, and with time, will break down while releasing the encapsulated protein at a controlled rate. Controlled delivery and stable levels of GDNF in culture allows for improved cell cultures, while saving researchers valuable time and resources.

### ORDERING INFORMATION

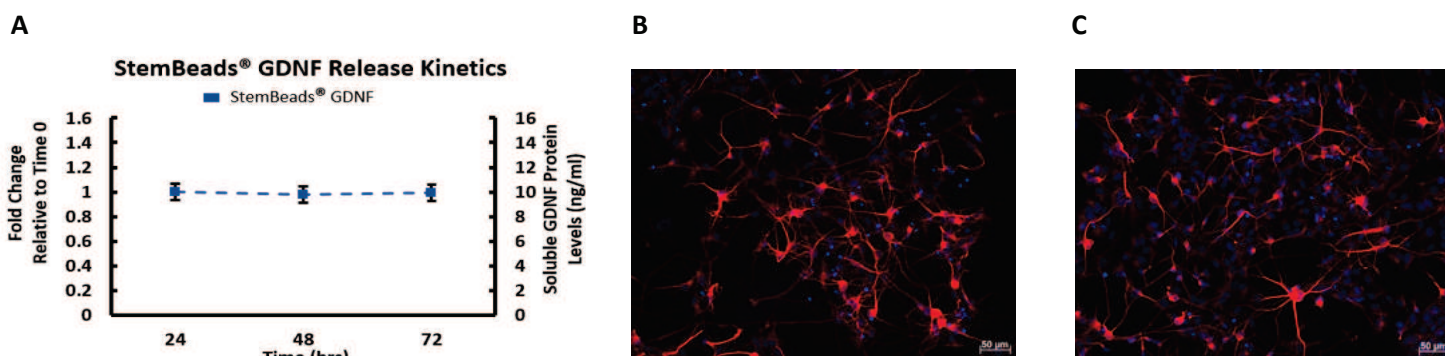
Catalog #	Product Name	Size	Release
SBGD1	StemBeads® GDNF	1 mL	10 µL/mL = 10 ng/mL



### PRODUCT SPECIFICATIONS

- Reconstitution & Use:** StemBeads® GDNF are provided as a ready-to-use 1 mL solution in DMEM/F12.
- Storage & Stability:** Upon arrival store at 4°C. StemBeads® GDNF are stable for 6 months without loss of activity when stored at 4°C.
- Release Profile:** 10 µL/mL StemBeads® GDNF = 10 ng/mL release of soluble GDNF.
- Average Particle Size:** 10 µm diameter.

### DATA



A) Measurement of GDNF released into culture medium over a three day (72 hrs) timecourse. The medium was treated once with 10 µL StemBeads® GDNF generating a stable release of 10 ng/mL. B) StemBeads® GDNF delivery in iPSC-Derived Cortical Neurons: MAP2A density at 30 days. C) StemBeads® BDNF and StemBeads® GDNF delivery in iPSC-Derived Cortical Neurons: MAP2A density at 30 days.

### GENERAL DIRECTIONS FOR USE

- 1) Aliquot desired volume of medium.
- 2) Mix vial of StemBeads® GDNF thoroughly by vortexing or pipetting prior to use.
- 3) Add StemBeads® GDNF into aliquot of medium at the desired concentration  
e.g. A concentration of 10 µL StemBeads® GDNF per 1 mL of medium will generate a 10 ng/mL release of soluble GDNF.
- 4) Remove medium from culture dish and wash twice with DMEM, PBS, F12 or basal medium.
- 5) Mix medium containing StemBeads® GDNF well and plate into culture dish.
- 6) Change medium every 4-6 days depending on cell density and culture conditions.

#### Notes:

- A) StemBeads® GDNF can also be supplemented into medium during passaging and plating of cells.
- B) 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.