Biomedical EliteCell Corp.
206 Archway Dr., Woodway, Texas 76712, USA
Contact us: info@ecbiomed.com

Tips for Using EliteGro™ to Grow Mesenchymal Stem Cells (MSCs)

- EliteGro™ shows optimal growth of MSC at 5% (v/v) in typical cell culture media, i.e. MSC basal medium such as alpha MEM.
- For using EliteGro™ product, **Heparin** at a final concentration of **2U/ml** in the culture media supplemented with 5% EliteGro™ is required. Failure to add Heparin will cause coagulation during cell culture in typical medium.
- We recommend seeding MSCs at approximately **6,000 ~ 8,000 cells/cm^2.** NOT over 10,000 cells/cm^2.
- We recommend to perform passage or cell harvest at 70% to 80% of cell confluence. Exceeding 100% of cell confluence may result in cell detachment.
- To harvest the cells, **0.05~0.06% trypsin is recommended**. Slowly add trypsin along the flask to cover the cells, incubate at **room temperature for 30 to 60 sec**. 0.12% or *0.25% trypsin may cause damage to the cells and results in low cell attach rate or decreasing cell growth rate after the sub-seeding.*

EliteGro™ Storage

- EliteGro™ product is most stable when stored frozen (-20°C) until preparing the completed medium.
- Thaw frozen EliteGro™ product in a 37°C water bath before use.
- Once EliteGro™ product is thawed, we recommend to use it immediately for completed medium preparation (e.g. 5%), or to aliquot it into single-use tubes and store unused aliquots at -20°C.
- It is highly recommended to prepare the completed medium containing EliteGro™ (e.g. 5%) on the same day or one day before cell culture and store the unused completed medium containing EliteGro™ at 2ºC to 8ºC no longer than 2 weeks.

Precipitation in Cell Culture

- Clotting or insoluble particles may form in thawed EliteGro™, it is recommended to centrifuge at 3,400 xg for 3 ~ 5 minutes or to filter the liquid concentrate with a sterile 40 µm Cell Strainer to remove clotting or insoluble particles.

NOTE:

*i. 0.22 µm filtering is **NOT** recommended for EliteGro™ at 100% concentrate.*

ii. Repeated freeze-thaw cycles should be avoided, as they will cause an increase in insoluble particles and potential decrease EliteGro™ performance.

iii. Thawing EliteGro™ at 37°C, instead of at 4°C, is recommended to reduce the clot or insoluble particles forming.