

Tips for Using NeoPL™-Boost in Human MSC Expansion

AICON-BIO® brand NeoPL™ products show optimal growth of grow human Mesenchymal Stem Cells (hMSCs) at 5 % (v/v) in typical cell culture media, i.e. α -MEM, which contains 2 mM L-Glutamine. We recommend seeding hMSCs at approximately $3 \times 10^3 \sim 6 \times 10^3$ cells per cm^2 . **NeoPL™-Boost has been fibrinogen-depleted and does not require the addition of heparin in the cell culture media.**



Storage

NeoPL™-Boost is most stable when stored frozen (-20°C).

Usage

- 1. Please thaw frozen NeoPL™-Boost in 37°C water bath before use.** Once NeoPL™-Boost is thawed, remove from water bath immediately. **Particulates will be observed after thawing. Particulate formation is normal will not affect performance. Additional filtration is not recommended.**
2. Thawing the product and preparing aliquots as soon as it is received and store unused aliquots at -20°C .
3. Storage at 4°C is recommended for periods no longer than 1 week.
4. Do not store complete media at 4°C for longer than 1 week.

Precipitation in Cell Culture

Clotting or insoluble particles may be visible in thawed NeoPL™-Boost, they are normal and do not affect cell culture performance. NeoPL™-Boost products recommend the addition of heparin to the culture medium at a final concentration of 2 IU/mL to prevent clot formation. Exact concentration may need to be optimized based on your application.

Repeated freeze-thaw

Although NeoPL™-Boost can sustain a few cycles without compromising the potency, repeated freeze-thaw should be avoided, as they will enhance the number/size of insoluble particulates and potentially lose the vital factors for cell culture performance.