

Culture of MSCs on Polystyrene or Dissolvable Microcarriers in VueLife® Bags

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Achieving clinically relevant doses of anchorage-dependent MSCs requires significant culture surface area for expansion. Microcarriers are commonly used to provide sufficient surface area in large bioreactor systems for allogeneic therapies but as we have demonstrated here, can be easily scaled to mid-size personalized medicine applications in fully closed, single-use culture bags. Saint-Gobain's VueLife® FEP bags are an attractive solution when combined with traditional treated polystyrene microcarriers as well as novel dissolvable microcarrier systems. Due to the inherent low surface energy of the fluoropolymer bag, cells and microcarriers do not adhere to the bag surface, resulting in up to 26-fold increase in 4 days of culture, depending on the donor and microcarrier system used.

We invite you to click through the different process steps for culturing human MSCs in VueLife® bags to learn about the recommended use protocol and special handling procedures at each stage to maximize cell yield. Two technical bulletins have been included summarizing both the culture procedure and expansion results in VueLife® bags with two different microcarrier systems.

Polystyrene Microcarriers with MSCs
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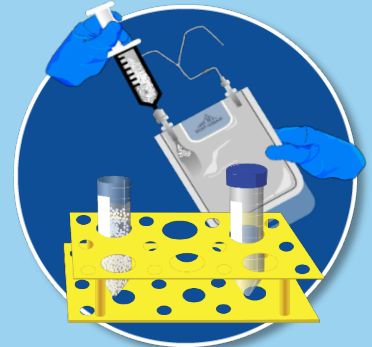
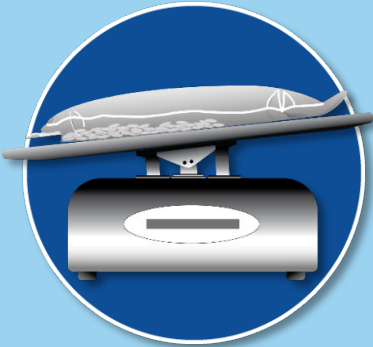
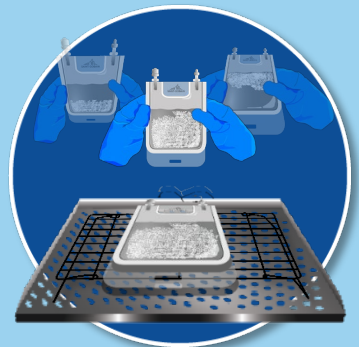
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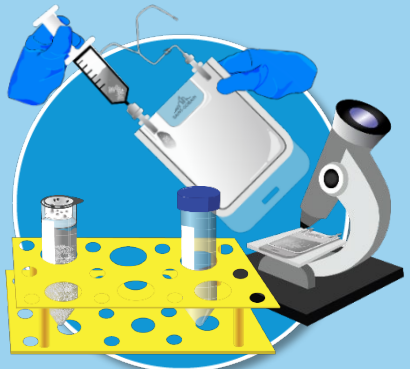
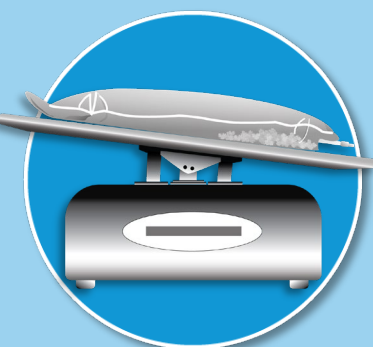
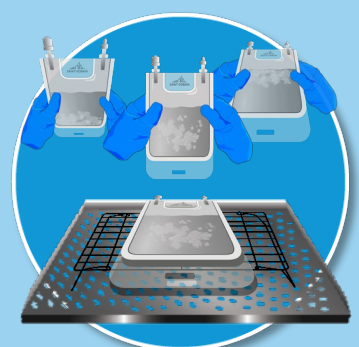
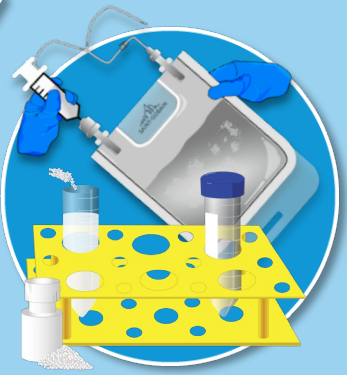
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Culture of MSCs on Dissolvable Microcarriers in VueLife® Bags



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