

PROTOCOL

“Anchored Cell detachment, concentration and cell wash for further studies”

Without Celartia Centrifuge

PETAKA G3 DESCRIPTION

	Petaka G3
Biotechnology	New. Patented Self regulated gas diffusion system.
Air space (volume lost)	3.8 % of the total volume
Surface available for cell growth	150 cm²
Average Cell Production	20 million cells
Device volume	59 cm³
Design	New. Patented. <ol style="list-style-type: none"> 1. Adapted to robotic cell culture 2. Prepared for internal cell concentration by centrifugation. 3. Prepared to segregate cells from supernatant. 4. Prepared for direct positive and negative immune-magnetic cell sorting 5. Prepared for Microgravity cell culture (orbital incubation) 6. Prepared for long distance cell shipping without freezing or cooling. 7. Prepared for induction of “in vitro cell dormancy”

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Adherent Cell Transfer without Petaka Centrifuge

Materials needed

PetakaG3
Flame
30 mL Syringe
Petaka tips
10 mL conical tubes
Laminar flow hood
Centrifuge
Cell counter

27% savings in instrumentation

Disinfect Petaka port with 90 % Ethanol and flame it briefly

Time:0.1 min



Completely withdraw the media

Time:1 min



Inject 4 mL of Trypsin solution

Time:0.1 min



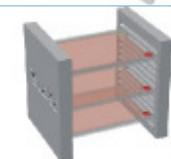
Rotate and gently shake the PETAKA to cover all cell culture surface with a thin layer of trypsin

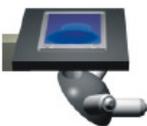
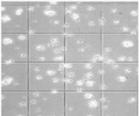
Time: 1 min



Incubate for 3 to 4 minutes at 37°C

Time 4 min



<p>Check cell detachment under the microscope Time: 1 min</p>	
<p>Disinfect Petaka port with 90% Ethanol and flame it briefly Time:0.1 min</p>	
<p>Inject into Petaka 6 mL of media having 20% FBS to inhibit the trypsin activity Time: 0.1 min</p>	
<p>When the injection is complete, withdraw a small sample of cell suspension Time: 0.5min</p>	
<p>Count the cell content in cells/mL and estimate the total amount of cells during the first centrifugation Time:5 min compensated by centrifugation time</p>	
<p>Completely withdraw the media Time:1 min</p>	
<p>IN LAMINAR FLOW HOOD. Transfer cell suspension to a 10 mL conical tube Close the tube with cap. Time: 1 min</p>	
<p>Close the tube with the cap</p>	
<p>Centrifuge the conical tube at the necessary RPM and for sufficient time to obtain a soft cell pellet Time: 6 mins</p>	
<p>IN LAMINAR FLOW HOOD. Decant the media keeping intact the cell pellet. Time: 0.1 min</p>	
<p>IN LAMINAR FLOW HOOD. Add 10 mL of PBS to the conical tube and vortex it until complete cell suspension. Time: 2 mins</p>	
<p>Close the tube with the cap</p>	

<p>Centrifuge the conical tube at the necessary RPM and time to obtain a soft cell pellet Time: 6 mins</p>	
<p>IN LAMINAR FLOW HOOD. Decant the media keeping the cell pellet intact . Time: 0.1 min</p>	
<p>Transfer the cells to the desired device adjusting volumes TOTAL Time: 24.1mins 15.7% savings time compared to T75 flask</p>	