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Conditioned Media Concentration with Amicon Ultra Centrifugal Filters

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Protocol status: Working
We use this protocol and it's working

ABSTRACT

Conditioned media has to be concentrated for downstream processing. To do this, complete media was removed the day before the study endpoint from cultured cells/tissue, and were washed with serum-free media. Cells/tissue were then incubated with serum-free media for 24 hours. After 24 hours, the conditioned media was collected from cultured cells/tissue and concentrated using centrifugal filters.

MATERIALS

- Amicon Ultra-0.5 Centrifugal Filters, 3-kDa MWCO (Millipore Sigma)
- Centrifuge

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- 1 Insert the Amicon Ultra 0.5 mL Centrifugal Filter into one of the provided microcentrifuge tubes.

- 2 Add up to 0.5 mL of conditioned media to the filter device and cap it.

- 3 Place the capped filter device into the centrifuge rotor and align the cap strap toward the center of the rotor; counterbalance with a similar device.

- 4 Spin the device at $12,000 \times g$ for approximately 10 minutes.

- 5 Repeat steps 2 to 4 until the entire volume of conditioned media is concentrated down to $\sim 50 \mu\text{L}$.

- 6 Remove the assembled device from the centrifuge and separate the filter device from the microcentrifuge tube.

- 7 To recover the concentrated solute, place the Amicon Ultra filter device upside down in a clean microcentrifuge tube. Place in the centrifuge and align the open cap towards the center of the rotor; counterbalance with a similar device.
- 8 Spin for 2 minutes at $1,000 \times g$ to transfer the concentrated sample from the device to the tube.
- 9 Continue with downstream processing or store at -80°C .