# Preparation of Lysates from Cultured Cells

#### Step 1. Prepare adherent cultured cells

- 1. Culture  $1 \times 10^6$  to  $1 \times 10^7$  cells.
- 2. Trypsinize the cells and remove the cells using a cell scraper.
- 3. Transfer cells to a 15 mL conical tube and spin at  $500 \times g$  at  $4^{\circ}$ C for 5 mins.
- Carefully aspirate the supernatant and resuspend the cells in 5 mL of ice-cold PBS and spin again at 500 × g at 4°C. Repeat this step once with 5 mL of ice-cold PBS.
- 5. Remove as much supernatant as possible without disturbing the cell pellet. Proceed to Step 3 Lyse Cells.

## Step 2. Prepare suspension cells

- 1. Culture  $1 \times 10^6$  to  $1 \times 10^7$  cells.
- 2. Transfer cells to a 15 mL conical tube and spin at  $500 \times g$  at  $4^{\circ}$ C for 5 mins.
- 3. Carefully aspirate the supernatant and resuspend the cells in 5 mL of ice-cold PBS and spin again at 500 × g at 4°C.
- 4. Remove as much supernatant as possible without disturbing the cell pellet. Proceed to Step 3 Lyse Cells.

# Step 3. Lyse cells

- 1. To the prepared cultured cells from Step1 or Step 2, add 200 μL of ice-cold ProcartaPlex<sup>TM</sup> Cell Lysis Buffer (EPX-99999-000) to the cell pellet.
- 2. Pipette up and down 8-10 times and incubate on ice for 5 mins.
- 3. Transfer the entire contents to a 1.5 mL microcentrifuge tube.
- 4. Centrifuge at  $14,000 \times g$  (benchtop centrifuge) for 10 mins at  $4^{\circ}$ C.
- 5. Transfer the supernatant to a new tube. Assay the samples immediately or store them at -80°C.

### Optional

Perform a protein assay using a small aliquot of the lysate sample by following the manufacturer's protocol of a protein assay kit. We recommend Lowry Protein Assay for measuring protein concentrations of cell lysates. We recommend adjusting all samples to equal protein concentration at a range of 4-8 mg protein/mL using ice-cold ProcartaPlex<sup>TM</sup> Cell Lysis Buffer.

To proceed with the ProcartaPlex Protocol, add 25  $\mu$ L of Universal Assay Buffer (EPX-11111-000) to 25  $\mu$ L of the prepared sample to each sample well.

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Product label explanation of symbols and warnings



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