

Fectopro Transfection for Membrane Proteins 2 ml Culture Volume

Reagents:

1.8 mL Expi293 tetR Cells at 3E6 cells/mL

1.5 µg Plasmid (pCDNA 3.1 tet/zeo if inducible)

FectoPro Transfection reagent (Polyplus)

Optimem

HBSS (minus Mg or Ca) with 20 mM Hepes pH 7.4

300 mM valproic acid dissolved in H₂O

40% glucose dissolved in H₂O

0.4 mg/mL doxycycline hyclate in HBSS (only if using an inducible plasmid)

Day 1:

Place 0.2 mL OMEM in an Eppendorf tube

Add 1.5 µg DNA, mix well by pipetting

Add 1.6 µL FectoPro, mix well by pipetting

Incubate at room temperature for 10 minutes

Mix into 1.8 mL of cells at 3E6 cells/mL drop-wise

Day 2: (18-24 hours after transfection)

Make 20 µl (in water) per transfection of:

- 300 mM valproic acid
- 40% glucose

Because filtering wastes a lot of volume, make twice as much as you need, or more.

Filter sterilize into a new Eppendorf using a syringe

Add 5 µM kifunensine if necessary (if the protein is glycosylated)

Day 3: (24 hours after enhancing)

If the protein is in an inducible vector, induce with 20 µl of filter sterilized 0.4 mg/mL doxycycline hyclate in HBSS

Day 4:

Harvest Cells 28-32 hours post induction