

# Gene transfection

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## Abstract

**Citation:** Jiao Wang Gene transfection. **protocols.io**

dx.doi.org/10.17504/protocols.io.iarcad6

**Published:** 05 Jun 2017

## Protocol

### Step 1.

Seed cells in 24-well plates at a density of  $1 \times 10^5$  cells/500  $\mu$ l antibiotic-free medium. Then culture cells under 5% CO<sub>2</sub>, in a 95% humidified atmosphere at 37°C, for 24 h.

### Step 2.

After 24 h, discard the medium and replace the fresh RPMI 1640 basal medium for transfection.

### Step 3.

Dilute 0.5  $\mu$ g pcDNA3-ATP11A and 0.5  $\mu$ g pcDNA3-TMEM30A plasmids with 20  $\mu$ l RPMI 1640 basal medium, and gently mix five times.

### Step 4.

Gently vortex and mix the transfection reagent, dilute 1  $\mu$ l *Lipofectamine*<sup>™</sup> 2000 (Gibco, USA) with 25  $\mu$ l RPMI 1640 basal medium, gently breathe five times and allow to stand for 5 minutes at room temperature.

### Step 5.

Mix the transfection reagent and plasmid dilution, gently aspirate five times to mix and incubate at room temperature for 20 minutes.

### Step 6.

Dropwise add the transfection mixture of *Lipofectamine*<sup>™</sup> 2000-RPMI 1640 medium (50  $\mu$ l / well) to the cells, and gently mix.

### Step 7.

Incubate the cells under 5% CO<sub>2</sub> in a 95% humidified atmosphere at 37°C for 6 h. After 6 hours, replace the medium with fresh.