

# GenJet™ In Vitro DNA Transfection Reagent for WEHI-231 Cell

----- A General Protocol for Transfecting plasmid DNA to WEHI-231 Cell

- ☐ 100 µl  
☐ 500 µl  
☐ 1000 µl



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This product is for laboratory research ONLY and not for diagnostic use

## Introduction:

GenJet™ In Vitro DNA Transfection Reagent (Ver. II) is upgraded version of GenJet™ In Vitro DNA Transfection Reagent. With a new chemistry, more DNA condensing groups were released in the new version compared with old version GenJet™, leading to 3-20 times more efficient in DNA delivery. GenJet™ (Ver. II) for WEHI-231 Cell was formulated and pre-optimized specifically for transfecting WEHI-231 cell.

## Important Guidelines for Transfection:

- Maintain the same seeding conditions between experiments. Use low-passage cells and make sure that cells are healthy and greater than 90% viable before transfection.
- For maximum transfection efficiency, we recommend using GenJet™ Transfection Buffer (1x) to dilute plasmid DNA and GenJet™ Reagent.

## Standard Transfection of WEHI-231 Cell

### Step I. Preparation of Working Solution of GenJet™ Transfection Buffer:

GenJet™ Transfection Buffer (5x) is provided as 5x concentrated stock solution. To make working solution, dilute one part of the stock solution with 4 parts of ddH<sub>2</sub>O into a sterile bottle. The working solution is stable at 4 °C-RT for 12 months.

### Step II. Transfection of WEHI-231 Cells:

Use this procedure to transfect plasmid DNA into WEHI-231 cells in a 24-well format. For other formats, see **Scaling Up or Down Transfections** below. All amounts and volumes are given on a per well basis.

- The day of transfection, count the cells to determine culture density. Plate 1x10<sup>5</sup> cells per well in 0.5 ml of complete growth medium. Cell density should be ~80% confluent on the day of transfection.

**Note:** GenJet™ reagent is NOT interfered by serum and antibiotics, therefore serum and antibiotic containing medium can be used during the entire experiment.

- For each well of cells to be transfected, dilute 0.5 µg plasmid DNA with 50 µl working solution of GenJet™ transfection buffer prepared from **Step I**. Pipette up and down to mix.
- Add 1.5 µl of GenJet™ Reagent directly to the diluted plasmid DNA solution followed by mix gently and incubate for ~15 minutes at RT.  
**Note: Never keep the complex longer than 30 minutes.**
- Add the 50 µl transfection mix to the cells drop wise. Gently rock the plate back and forth and return the plate to CO<sub>2</sub> incubator.
- Replace transfection medium by cell growth medium ~5 hours after transfection when necessary.
- Gene silencing is usually measured 24-48 hours post transfection.

**Storage:** GenJet™ Transfection Reagent is stable for up to 12 months at 4 °C. This item shipped at ambient temperature

## Scaling Up or Down Transfections

To transfect WEHI-231 cells in different tissue culture formats, refer to the table below (Given on a per well basis).

Culture Vessel	Growth Medium (ml)	Cells per Well	Transfection Buffer (µL)	Plasmid DNA (µg)	GenJet™ Reagent (µL)
96-well	100	2 x 10 <sup>4</sup>	10	0.1	0.3
24-well	500	1 x 10 <sup>5</sup>	50	0.5	1.5
12-well	1.0	2 x 10 <sup>5</sup>	75	1.0	3.0
6-well	2.0	5 x 10 <sup>5</sup>	100	2.0	6.0
60 mm	4.0	8 x 10 <sup>5</sup>	300	5.0	15
10 cm/T-75 flask	8.0	2 x 10 <sup>6</sup>	800	9.0	27