PolyMag Premium™
Magnetofection Technology

To find the ideal conditions, PolyMag Premium must be tested at ratios of **2 µL/µg**, **3 µL/µg** and **4 µL/µg** (µL of PolyMag Premium / µg of DNA). For the DNA quantity, we suggest **0.125 µg** per well in 96-well, **0.5 µg** per well in 24-well and **2 µg** per well in 6-well.

1. Prepare 3 wells: seed the cells to be at 70% confluent on the day of transfection

96-well plate
0.05-0.2 x 1.10^5 cells

24-well plate
0.5-1 x 1.10^5 cells

6-well plate
2-5 x 1.10^5 cells

2. Prepare 3 identical tubes of DNA

96-well plate
0.125 µg in 50 µL of serum-free medium or buffer **X 3**

24-well plate
0.5 µg in 100 µL of serum-free medium or buffer **x 3**

6-well plate
2 µg in 200 µL of serum-free medium or buffer **x 3**

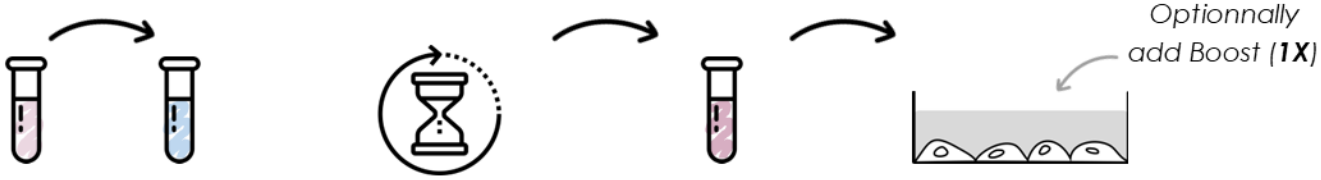
3. Prepare 3 tubes of PolyMag Premium

96-well plate
0.25 µL/0.375 µL/0.5 µL

24-well plate
1 µL/1.5 µL/2 µL

6-well plate
4 µL/6 µL/8 µL

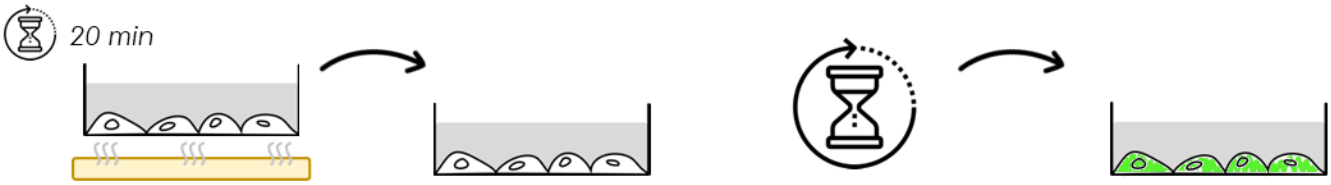
4. Mix each DNA suspension to each tube of PolyMag Premium



Incubate 15—20 min at RT

Distribute each preparation of complexes in each well

5. Incubate the cells 20 min on the magnetic plate and follow transgene expression



Place the cells onto the magnetic plate

Remove the cells from magnet

Incubate 24 to 72 h at 37°c

Chose the best ratio DNA:PM Premium

Contact us regarding protocols for DNA transfection in suspension cells, optimization procedures or for gene silencing with siRNA at: **tech@ozbiosciences.com** or visit our website: **www.ozbiosciences.com.**

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PolyMag Premium™
Magnetofection Technology

Before you begin

PolyMag Premium™ is a Magnetic nanoparticle formulation specifically designed to achieve high transfection efficiency in a wide variety of primary and hard-to-transfect cells.

Protocol | General considerations

• Allow reagents to reach room temperature.
• Use medium w/o any supplement for preparation of complexes, avoid using RPMI.
• Use PolyMag Premium at a **3:1 ratio**.

⚠ For doses of PolyMag Premium less than 1µL, dilute the reagent with deionized water only.
⚠ Discard any dilution after experiment.

1. Cells preparation:
One day before transfection prepare the cells according to table 1 (recommended 70% confluence).

Cell culture format	Adherent cell nb. / well
96-well	0.05-0.2 x 1.10^5
24-well	0.5-1 x 1.10^5
6-well	2-5 x 1.10^5

Table 1: Cell number suggested per well.

2. Preparation of DNA/PolyMag Premium complexes:

a. *PolyMag Premium:* mix the reagent and add **0.375** to **6 µL** in a microtube (refer to Table 2).

a. *DNA:* Dilute the indicated quantity of DNA in **50** to **200 µL** of culture medium w/o supplement (refer to Table 2).

c. Add DNA solution to PolyMag Premium, mix gently by carefully pipetting up and down.

d. Incubate the mixture at room temperature for **20 min**.
⚠ Do not vortex or centrifuge.

3. Transfection | Magnetofection:
a. Add the complexes onto cells drop by drop and gently rock the plate to ensure a uniform distribution.

b. Optionally: add Boost (**1X final**) directly to the cells.

c. Place the cell culture plate on the magnetic plate for 20-30 min.

d. Cultivate the cells at **37°C** in a CO_2 incubator under standard conditions until evaluation of transgene expression.

Cell culture format	DNA quantity	PolyMag Premium volume	Dilution volume	Transfection volume
96-well	0.125 µg	0.375 µL	50 µL	150 µL
24-well	0.5 µg	1.5 µL	100 µL	500 µL
6-well	2 µg	6 µL	200 µL	2 mL

Table 2: Recommended DNA amounts, PolyMag Premium volumes and transfection conditions.

Protocol | Suspension cells | siRNA transfection | Protein production

This reagent is also effective for multiple applications such as transfection in suspension cells, gene silencing with siRNA, protein production, co-transfections …
Contact us regarding protocols for these applications, optimization procedure, or any technical question:
✉ **- tech@ozbiosciences.com.**

Use, handling and storage

For Research Use Only. Not for use in humans. Not for use in diagnostic or therapeutic purposes.

Shipping conditions: Room Temperature
Storage conditions PolyMag Premium: -20°C
Shelf life: 1 year from the date of purchase

Kit contents

PP00100 : 100 µL of PolyMag Premium reagent + 300 µL Boost
PP00200 : 200 µL of PolyMag Premium reagent + 500 µL Boost
PP1000 : 1 mL of PolyMag Premium reagent + 3 mL Boost

Certificate of analysis on demand.

Related Products

Ref	Description
#DG80500	DreamFect Gold transfection reagent
#PL00020	pVectOZ transfection plasmids – positive controls

Purchaser Notification | Conditions of Sale

This product is sold in accordance with our general conditions of sale that you can find on our website: https://ozbiosciences.com/content/3-terms-and-conditions.

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