PolyMag Neo™
Polymer complex for all nucleic acid transfection

To find the ideal conditions, PolyMag Neo must be tested at ratios of **1 µL/µg** (µL of PolyMag Neo / µg of DNA). For the DNA quantity, we suggest testing 3 different conditions.

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



2. Prepare 3 tubes of DNA with different amounts of nucleic acids.



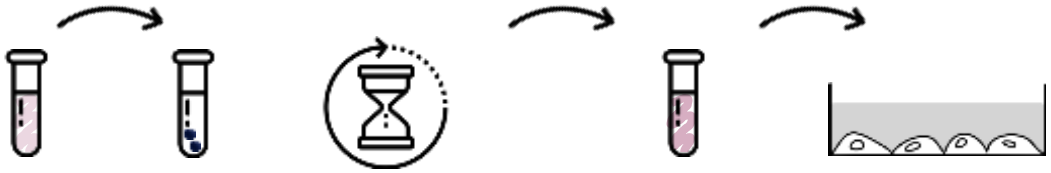
96-well plate	24-well plate	6-well plate
0.0625 µg/0.125 µg/0.25 µg	0.25 µg/0.5 µg/1.0 µg	1 µg/2 µg/4 µg
In **50 µL** serum-free buffer	In **100 µL** serum-free buffer	In **200 µL** serum-free buffer

3. Prepare 3 tubes of PolyMag Neo



96-well plate	24-well plate	6-well plate
0.0625 µL/0.125 µL/0.25 µL	0.25 µL/ 0.5 µL/1 µL	1 µL/2 µL/ 4 µL

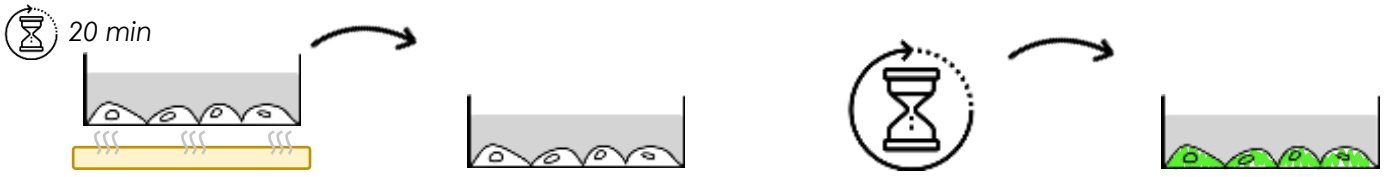
4. Mix each DNA suspension to each tube of PolyMag Neo



Incubate 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 magnet

Incubate **24** to **72 h** at 37°C

Choose the best ratio DNA:PolyMag Neo

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 Neo™
Magnetofection Technology

Before you begin

PolyMag Neo™ 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 (RT).
• Use medium w/o any supplement for preparation of complexes, avoid using RPMI.
• Use PolyMag Neo at a **1:1 ratio**.

⚠ For doses of PolyMag Neo 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	2-4 x 1.10^5

Table 1: Cell number suggested per well.

2. Preparation of DNA/PolyMag Neo complexes:

a. DNA: Dilute **0.0625** to **4 µg** DNA in **50** to **200 µL** of culture medium w/o supplement (refer to Table 2).

b. PolyMag Neo: Homogenize the reagent and add **0.0625** to **4 µL** in an empty microtube (refer to Table 2).

c. Add DNA solution to PolyMag Neo, 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. Place the cell culture plate on the magnetic plate for 30 min.

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

Cell culture format	DNA quantity (µg)	Dilution volume	PolyMag Neo ratio (µL / µg)	Transfection volume
96-well	0.0625/0.125/0.25	50 µL	1:1	150 µL
24-well	0.25/0.5/1.0	100 µL		500 µL
6-well	1/2/4	200 µL		2 mL

Table 2: Recommended DNA amounts, PolyMag Neo ratio 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 Neo: 4°C
Shelf life: 1 year from the date of purchase

Kit contents

PG60100 : 100 µL of PolyMag Neo reagent
PG60200 : 200 µL of PolyMag Neo reagent
PG61000 : 1 mL of PolyMag Neo reagent
KC30200 : 100 µL of PolyMag Neo reagent + 100 µL PolyMag Premium + 100 µL CombiMag reagent + Super Magnetic plate

Certificate of analysis on demand.

Related Products

Ref	Description
#PP1000	PolyMag Premium transfection reagent
#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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