

Product Datasheet for



EUFECT® Green

RNA Transfection Kit, order no. #3001

0.3ml Lipidmix, 1.2 ml RNA Buffer

Product type:

LNP-based RNA Transfection Kit

Description:

Instrument-free lipid nanoparticle (LNP) formulation kit for efficient RNA delivery and transfection in cultured cells.

Kit contents:

0.3 ml EUFECT® Green Lipid Mix

1.2 ml RNA Buffer

Storage:

EUFECT® Green Lipid Mix: 4°C for 2–3 weeks or –80°C for approximately 6 months.

RNA Buffer: 4°C for approximately 6 months.

LNP preparation and cell transfection:

Dilute the mRNA in RNA Buffer to a final concentration of 100 ng/μl. Add one volume of EUFECT® Green Lipid Mix directly to four volumes of the mRNA-containing RNA Buffer (1:4, v/v). Immediately vortex the mixture for 5 s and incubate the LNPs for 15 minutes at room temperature. This procedure typically results in LNP concentrations of approximately $1\text{--}4 \times 10^{11}$ particles/ml.

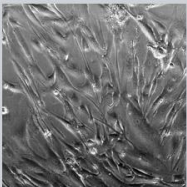
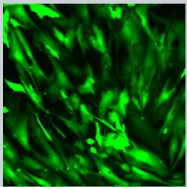
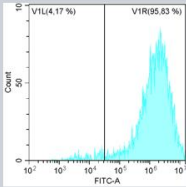
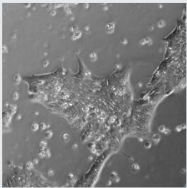
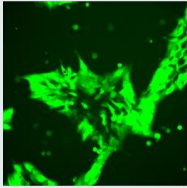
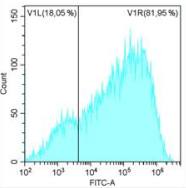
LNPs can be used immediately after preparation or stored at 4°C for up to 4 days. Do not freeze the prepared LNP solution.

For transfection, add the LNP preparation directly to the cell culture medium. A final LNP concentration of approximately 2×10^9 particles/ml can be used as a starting condition and may be optimized depending on the cell type.

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

Application Example:

Human fibroblasts and human iPSCs were transfected with eGFP mRNA-loaded EUFECT® Green LNPs.

	Bright Field	Fluorescence	Flow Cytometry
Human fibroblasts			
Human iPSCs			

Human fibroblasts and human iPSCs were seeded in 48-well plates and transfected with 5 µl of eGFP mRNA-loaded EUFECT® Green LNPs (2×10^9 particles/ml; 1×10^9 particles/well). Fluorescence microscopy and flow cytometric analysis were performed 24 h after transfection.

EUFECT® Green was jointly developed by CHESS GmbH and Steinbeis-Innovationszentrum Zellkulturtechnik

	
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