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Lentivirus Transduction Enhancer II

Catalog Number: D024

Content and Storage

Component	Volume	Shipping Condition	Storage Condition
Lentivirus Transduction Enhancer II	1 mL	Room temperature	RT for one year

Product Description and Application

Lentivirus Transduction Enhancer II is a nontoxic novel chemical reagent that increases lentiviral transduction efficiency by modulating membrane permeability. Normally, incubation of lentivirus particles in cells in the presence of polybrene is generally efficient in transducing many cell types. However, due to polycation property, polybrene is toxic for some sensitive cells. Lentivirus Transduction Enhancer II is a neutral and nontoxic transduction enhancer, which significantly increases lentivirus transducing efficiency while maintaining cell membrane integrity.

Lentivirus Transduction Enhancer II is most effective when added to cell culture media at the time of transduction. Recommended working concentration ranges from 1:100 to 1:50. However, the working concentration is highly cell line-dependent. Lower or higher dilution ratio may be required to optimize the effect.

Protocol

1. Day 1. Plate your cells of interest into a 6-well plate 24 hours before infection with a density of 2×10^5 cells per well.
2. Day 2. Infect each well with lentivirus at the final titer of 10 MOI (or an optimal MOI in the range of 2-100). Add in **Lentivirus Transduction Enhancer II** at 1:100 or your optimized dilution ratio. Incubate at 37^oC with 5% CO_2.
3. Day 3. Replace the viral supernatant with the appropriate complete growth medium and incubate at 37^oC with 5% CO_2.
4. Day 4 and on. If the lentiviral vector contains a drug resistance gene, begin drug selection by replacing media with drug containing media every 3-4 days until resistant colonies can be identified. If the lentiviral vector contains a fluorescent tag, you can evaluate transduction efficiency by checking signals under the fluorescence microscope.

Note: MOI = (Product Titer x Infection Sample Volume) / Total Cell Number