

# REAGENT 007

## PRODUCT DESCRIPTION:

Reagent 007 is a formulation for transfecting bacmid DNA into adherent Sf9 cells growing in serum-free medium

## PACKAGE CONTENTS:

Cat# R007-0750 – 0.75ml  
Cat# R007-1500 – 1.5 ml  
Cat# R007-5000 - 5 ml  
Cat# R007-P001 - 1 mg  
Cat# R007-P010 - 10 mg

## STORAGE CONDITIONS:

Store at +2-8°C for up to 9 months.  
Avoid freezing/thawing cycles.  
Lyophilized powder can be stored at -20°C for up to 1 year



# REAGENT 007

## REQUIRED MATERIALS:

- ▶ Bacmid DNA
- ▶ Sterile deionized water
- ▶ Suitable serum-free medium
- ▶ Microcentrifuge tubes
- ▶ 6-well plates for transfection

**We have found the following media to be suitable for use as a transfection medium with Reagent 007:**

Ex-Cell 420 (Sigma-Aldrich, Cat # 14420C)  
Sf900 II SFM (Gibco, Cat # 10902)  
TNM-FH (Sigma-Aldrich, Cat # T3285)\*

\* Prepare cells in TNM-FH medium without serum for transfection and add serum or change medium after 2-4 hours of incubation

**Supplementation of the transfection medium with additional Pluronic® F-68 or any other anti-clumping agent is not recommended as it may cause a dramatic decrease in transfection efficiency!**

## PROTOCOL

### 1. Seed cells

▶ Seed  $8 \times 10^5$  cells in 2 ml on a 6-well plate

Step 1



▶ Let the cells attach for 0.5 to 1 hours at 28°C

### 2. Form complexes

▶ Prepare Reagent 007 Working Solution in an amount sufficient for all transfections (20  $\mu$ l per reaction). To prepare a Working Solution, dilute the Stock Solution 5 times in deionized water: 1 volume Stock Solution + 4 volumes water. A Working Solution can be stored for further use at +4°C for up to one week.

Step 2



▶ Prepare bacmid solution in water into appropriate tubes containing 500 ng in 30  $\mu$ l deionized water per reaction.

If initial stock of bacmid DNA is prepared in TE buffer (10 mM TrisHCl, 1 mM EDTA), the volume of TE in final volume of complex must not exceed 10%

▶ Add 20  $\mu$ l of Reagent 007 Working Solution to the DNA solution and mix immediately by pipetting gently up and down 5-6 times.

Do not vortex the complex, it will decrease transfection efficiency!

**3. Incubate** at room temperature for 5-10 minutes.

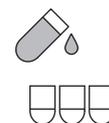
Step 3



5-10min

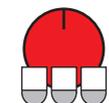
**4. Add DNA/R007 complex** by pipetting it drop-wise to the cells and mix with cell media by using gentle movements

Step 4



**5. Incubate** at 28°C for 3 days\*

Step 5



28°C

**\*6. When using cells that require presence of serum in medium, incubate cells in serum-free medium for 2-4 hours after transfection and add 10% FBS or change medium. The incubation is continued at 28°C.**

Step 6\*



## 6-well format

Suitable medium	2 ml
Cells	$8 \times 10^5$
bacmid DNA in water	500 ng in 30 $\mu$ l
Reagent 007 Working Solution	20 $\mu$ l
DNA/R007 complex final volume	50 $\mu$ l

## NOTES:

- 1) For further upscaling just increase all quantities and volumes proportionally
- 2) For transfection, always use cells in exponential growth phase with a viability >95%