ACE TransMedium Instruction Manual



【Product Name】： ACE TransMedium

【Product Code】： ACE05101

【Package Specification】： 100ml

【Scope of Application】： For research use only. Not suitable for clinical diagnosis or treatment

【Intended Use】： ACE TransMedium (Product No.: ACE05101) is a chemically defined, protein-free and animal component-free medium specifically formulated to provide a stable transfection environment for DNA plasmid-transfection reagent complexes.

【Transport Requirements】： Transport on wet ice

【Storage Conditions and Shelf Life】： Store at 2-8 ℃. Shelf life is 12 months

【Usage Method】

Transient Transfection (using 100ml cell suspension as example)

(1) Prepare two 15ml sterile centrifuge tubes. To one tube, add 5ml ACE TransMedium and 100 μ g sterile plasmid DNA, mix gently by pipetting; take the other tube, add 5ml TransMedium and 500 μ l ACE trans transfection reagent, mix gently by pipetting;

(2) Transfer all liquid from the tube containing transfection reagent to the tube containing plasmid, mix gently by pipetting;

(3) Let stand at room temperature for 10min to prepare plasmid-vector complexes;

(4) Remove cells from constant-temperature shaker, slowly add the prepared plasmid-vector complexes while shaking, then return to CO2 constant-temperature shaker for suspension culture. After 3 hours, appropriate antibiotics may be added if needed.

2.Product Expression and Detection

(1) At 24 hours post-transfection, add 600 μ l/L of 293 cell protein expression enhancer (KE-293) to increase product yield;

(2) The transient transfection nutrient supplement (KT-FEED 50×) can improve product expression levels and should be added once at 24 hours post-transfection;

(3) Measure product expression levels between days 5-7 post-transfection;

(4) For most recombinant proteins, peak expression levels are typically achieved around day 6 post-transfection. Clients may determine the optimal harvest time based on cell status and expression levels.。

Key Operating Points and Precautions:

a. KPM usage: Total volume should be 1/10 of the cell suspension; plasmid dosage is 1μg/ml (DNA/culture medium volume);

b. Plasmid-to-transfection reagent ratio: Recommended mass ratios are 1:3, 1:4, 1:5, or 1:6. For most plasmids, 1:5 yields optimal results. Users may optimize conditions based on experience, but ratios below 1:3 or above 1:8 are not recommended;

c. Expression enhancers and nutrient supplements: Optional based on user requirements;

d. Incubation protocol:

Do not shake or vortex during plasmid-transfection reagent incubation (violent agitation may cause failure);

Prepare plasmid-vector complexes completely before removing cells from the shaker;

Add complexes to cells dropwise while shaking—avoid premature cell removal from the shaker.

Friendly Reminder:

After opening, store at 4° C and use within one week for optimal performance.