

Calcein AM Assay Buffer

Cat. No: E-CK-A153

Size: 100 mL

Cat.	Products	100 mL	Storage
E-CK-A153	Calcein AM Assay Buffer Manual	100 mL	-20 °C One Copy

Storage

Store at -20 °C for 12 months.

Introduction

Elabscience® Calcein AM Assay Buffer is specifically designed for the loading of Calcein AM probe and is compatible with PI staining working solution. On the basis of cell isotonic buffer, the product increases the efficiency of Calcein AM loading and reduces the leakage of Calcein in anionic cells and P-glycoprotein carrier cells, ensuring the best staining efficiency.

Experimental Procedure

1. Suspended cells: Collect the cells, centrifuge at 300×g for 5 min, discard the supernatant. Add 1 mL of PBS to resuspend the cells, centrifuge at 300×g for 5 min, discard the supernatant. Wash repeatedly 1 time, discard the supernatant.

Adherent cells: Carefully remove the culture medium of adherent cells, add an appropriate amount of PBS to each well to wash cells, repeat wash the slides and remove PBS.

2. Use Calcein AM Solution(100 μM) [E-CK-A164] and Calcein AM Assay Buffer to prepare an appropriate amount of staining working solution.

3. Suspended cells: Add 200 μL of Calcein AM staining working solution to resuspend 1~5×10⁵ cells in each group and incubate for 5~15 min at room temperature in the dark.

Adherent cells: Add Calcein AM staining working solution in a ratio of 100 μL per well in a 96-well plate or 200 μL per well in a 24-well plate and incubate at 37 °C for 10~30 min.

4. After incubation, the staining effect can be directly detected by flow cytometry or observe under a fluorescence microscope.

Note 1: Co-staining with Propidium Iodide (PI) Solution(750 μM) [E-CK-A165] can distinguish dead cells.

Note 2: For flow cytometry, Calcein can be detected in FITC channel while PI can be detected in PE or Percp/Cy5.5 channel.

Note3: Calcein is green fluorescent, Ex/Em=494nm/517nm; PI is red fluorescent, Ex/Em=535nm/617nm.

Cautions

1. This kit is for research use only.
2. Please take safety precautions and follow the procedures of laboratory reagent operation.

For Research Use Only

3. Please store the product at the appropriate temperature to avoid failure.
4. Wash cells with serum-free medium (serum may contain esterase) or PBS before staining. The Buffer should not contain primary or secondary amines, as fatty histamine can lyse AM esters and hinder loading.
5. Excessive acceleration and deceleration of centrifuge may cause cell loss. It is suggested to adjust the acceleration no more than 3 and deceleration no more than 2, that is, $Acc \leq 3$, $Dec \leq 2$.

For Research Use Only