

Fura-2, AM *UltraPure Grade*

目录号: ANT132/132L

规格: 50ug/5*50ug

CAS: 108964-32-5

简介: 在钙比例指示剂中, 最常用的是Fura-2和Indo-1。Fura-2是激发比率的, 而Indo-1是发射比率的。对于比率成像显微镜, Fura-2是首选的, 在比率成像中, 改变激发波长比发射波长更实际。结合Ca²⁺时, Fura-2表现出吸收位移, 可通过扫描300至400 nm之间的激发光谱来观察, 同时监测~510 nm处的发射。Fura-2, AM是一种可透过细胞的钙指示剂, 具有发射率和紫外线激发性。该AM酯形式可以无创地加载到活细胞中。

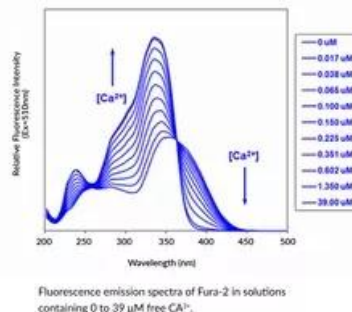
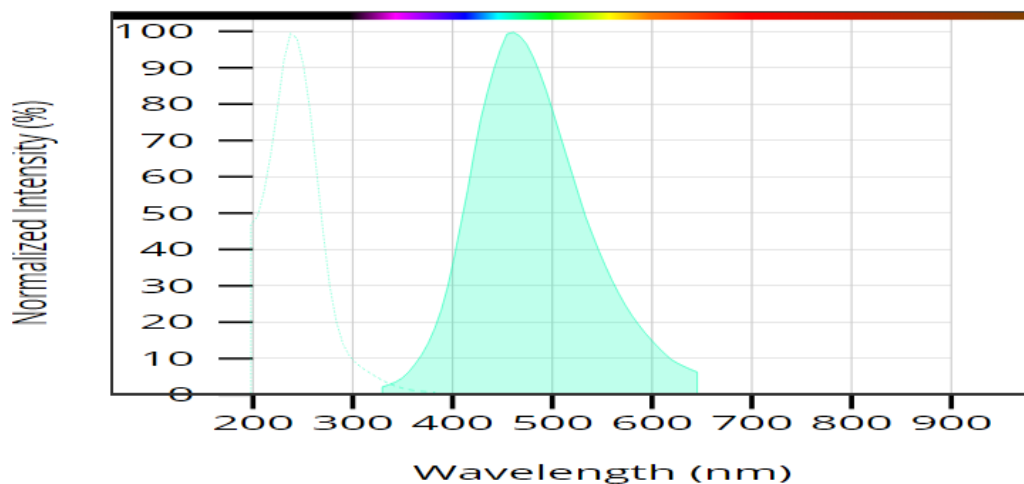
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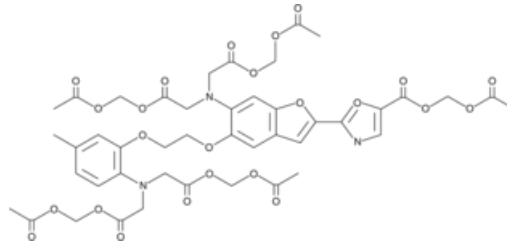
Excitation (nm): 340/380

Emission (nm): 510

Formulation): A solid

Solvent: DMSO





Required

Fura-2, AM *UltraPure Grade* *CAS 108964-32-5*

Hanks and Hepes Buffer *(HHBS) or a buffer of your choice

100% DMSO

Optional

10% Pluronic® F-127

25 mM Probenecid

步骤:

1. Prepare an HHBS buffer, a 10% Pluronic® F-127 solution, and a 25 mM Probenecid solution.

- For instructions on how to prepare a HHBS buffer, see our buffer recipe page
- For instructions on how to prepare a 10% Pluronic® F-127 solution, see recipe
- For instructions on how to prepare a 25 mM Probenecid solution, see recipe

2. Prepare a 2 mM to 5 mM Fura-2, AM *UltraPure Grade* *CAS 108964-32-5* stock solution in high quality anhydrous DMSO.

- Amount of Fura-2, AM *UltraPure Grade* *CAS 108964-32-5* to use: 1 mg
- Desired concentration: 2 mM
- In a suitable container mix 1 mg of Fura-2, AM *UltraPure Grade* *CAS 108964-32-5* with 499.07 µL of anhydrous DMSO.

3. Prepare a 2X working solution in HHBS with 10 µM Fura-2, AM *UltraPure Grade* *CAS 108964-32-5* 4 , 0.08% Pluronic® F-127 and 2 mM Probenecid.

- Final in-well concentration of Fura-2, AM *UltraPure Grade* *CAS 108964-32-5*: 5 µM
- Final in-well concentration of Pluronic® F-127: 0.04 %
- Final in-well concentration of Probenecid: 1 mM
- In a suitable container mix 16 µL of Fura-2, AM *UltraPure Grade* *CAS 108964-32-5*, 25.6 µL of 10% Pluronic® F-127, and 256 µL of 25 mM Probenecid. Next, add HHBS or a buffer of your choice until the volume is 3.2 mL.

Note: For most cell lines we recommend the final concentration of Fura-2, AM *UltraPure Grade* *CAS 108964-32-5* be 2 to 5 µM.

Note: Recommended final in well concentration of Pluronic F-127 is 0.02% to 0.04%.

Note: Recommended final in well concentration of Probenecid is 1 to 2.5 mM.

4. Add 100 µL of the dye working solution into the desired wells already containing 100 µL of culture medium.

- This step will dilute the dye working solution from 2X to 1X and adjust the final concentrations of each component to the following: 5 µM of Fura-2, AM *UltraPure Grade*

CAS 108964-32-5, 0.04% Pluronic® F-127, 1 mM Probenecid.

5. Incubate the dye-loading plate5 .

- a. Incubate the dye-loading plate in a cell incubator for 20-120 minutes.
- b. Incubate the dye-loading plate at room temperature for 30 minutes.

6. Prepare an HHBS buffer (or a buffer of your choice) with 1.0 mM Probenecid.

- a. In a suitable container add 160 μ L of 25 mM Probenecid. Next, add HHBS or a buffer of your choice until the volume is 4 mL.

7. Replace the dye working solution with the HHBS buffer or a buffer of your choice with 1.0 mM Probenecid.

- a. First, remove 200 μ L of the dye working solution and culture medium from the desired wells.
- b. To those same wells add back 200 μ L of HHBS (or a buffer of your choice) with 1.0 mM Probenecid.

8. Run your assay.

- a. Add desired treatment to your sample.
- b. Run the experiment as Ex/Em = 363/512 nm.

相关产品:

ANT131 BCECF,AM,UltraPure Grade

ANT133 Fluo-3,AM,UltraPure Grade

ANT134 Fluo-4,AM,UltraPure Grade

ANT138 Calcein,AM,UltraPure Grade

ANT141 Mito-Tracker Green

ANT142 Mito-Tracker Red

ANT143 JC-10,UltraPure Grade