

Pluronic® F-127 * Cell Culture Tested *

Ordering Information

Product Number: 20050 (10 g)

Storage Conditions

Store at Room Temperature *DO NOT FREEZE*
Expiration date is 12 months from the date of receipt

Introduction

Pluronic® F-127 is a nonionic surfactant that is 100% active and relatively non-toxic to cells at low concentrations, and frequently used with dye AM esters such as Indo-1 AM, Fura-2 AM, Calcein AM, Fluo-3 AM, Fluo-4 AM, Quest Fluo-8™ AM and Quest Rhod-4™ AM, etc. to improve their water solubility. Pluronic® F-127 may also be useful for dispersing other lipophilic probes. Appropriate controls should be performed to make certain that Pluronic® F-127 is not altering the membrane properties of the cells. For the convenience, we also offer 20% Pluronic® F-127 DMSO solution (Cat. # 20052) and 10% Pluronic® F-127 water solution (Cat. # 20053).

Chemical and Physical Properties

Molecular Weight: ~ 12,500
Solvents: water or DMSO

Guidelines for Use

Note: Following is our recommended protocol. This protocol only provides a guideline, and should be modified according to your specific needs.

1. Dissolve 1 g of Pluronic® F-127 in 10 mL distilled water to make a 10% (w/v) stock solution, or 2 g of Pluronic® F-127 in 10 mL of anhydrous dimethyl sulfoxide (DMSO) to make a 20% (w/v) stock solution. These may require heating from 40 to 50 °C for about 30 minutes. Store solution at room temperature.

Note: Do not refrigerate or freeze the Pluronic® F-127 solution since it may precipitate. If precipitation is observed, the precipitates can be dissolved by heating to 37 °C and vortexing before use.

2. Dilute the 10% or 20% Pluronic® F-127 stock solution (from Step 1) into the cell-loading buffer such as Hanks and 20 mM Hepes buffer (HHBS) at 1:1000 to 1:500 dilution to achieve a 0.02 to 0.04% working solution.
3. The DMSO stock solution of AM ester is then diluted into the 0.02 to 0.04% working solution (from Step 2) to achieve a final AM ester concentration between 1 µM and 10 µM.

Note: The final concentration of Pluronic® F-127 is normally kept at or below 0.08%.

4. The cells are incubated at a desired temperature for between 10 minutes and 1 hour.

Note: In general it is desirable to use the minimum amount of AM ester needed to achieve adequate fluorescence signal to noise levels.

5. After labeling, the cells are washed with HHBS or fresh medium before starting the experiment.

Disclaimer: This product is for research use only and is not intended for therapeutic or diagnostic application. Please contact our technical service representative for more information.