

Pluronic® F-127 *20% Solution in DMSO*

Ordering Information

Product Number: 20052 (10 mL)

Storage Conditions

Store at Room Temperature *DO NOT FREEZE*
Expiration date is 6 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 10% Pluronic® F-127 water solution (Cat. # 20053) and solid (Cat. # 20050).

Chemical and Physical Properties

Molecular Weight: ~ 12,500
Solvent: dimethylsulfoxide (DMSO)

Storage Conditions

Store at room temperature. DO NOT FREEZ and REFRIGERATE.
Expiration date: 6 months from the date of receipt.

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.

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. Mix an equal volume of 20% Pluronic® F-127 DMSO solution with the AM ester DMSO stock solution (1–5 mM) immediately before use.
2. The solution of AM ester and Pluronic® F-127 is then diluted into the cell-loading buffer such as Hanks and 20 mM Hepes buffer (HHBS) to achieve a final AM ester concentration of between 1 µM and 10 µM.

Note1: Alternatively, one can dilute the 20% Pluronic® F-127 stock solution into the cell-loading buffer at 1:1000 to 1:500 dilution to archive a 0.02 to 0.04% working solution first, and then add AM ester DMSO stock solution to achieve a final AM ester concentration of between 1 µM and 10 µM.

Note2: The final concentration of Pluronic® F-127 is normally kept at or below 0.08%.

3. 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.

4. 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.