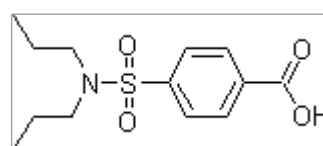




Probenecid, Cell Culture Tested

Product Description

Name :	Probenecid
Catalog Number :	Cell Culture Tested FP-288652 10x72 mg
Molecular Weight :	MW= 285,36
Solubility:	1M NaOH



Storage: Store at room temperature. Protect from light and moisture
Expiration date is 12 months from the date of receipt

Introduction

Probenecid is an inhibitor of organic-anion transporters located in cell membranes. These transporters often extrude fluorescent indicators from cells, and thereby contribute to poor dye retention. This phenomenon usually causes high background in the assays that require good retention of dye indicators inside cells. The use of probenecid to inhibit the activities of transporters, and thus to reduce leakage of intracellular dye indicators is a common method for reducing fluorescence background of calcium assays. Each vial is dissolved in 0.3 mL of 1 M NaOH, and then diluted into 100 mL of buffer to make the final concentration of probenecid 2.5 mM for your assays. It can be used to prevent fluorescent dyes (such as Indo-1 AM, Fura-2 AM, Fluo-3 AM, Fluo-4 AM, Fluo-8 AM, Rhod-2 AM and Rhod-4 AM) from leaking out of cells. We also offer the convenient RadiUse™ water-soluble and heat-stable probenecid in the format of powder (Cat. # 288653), solution (Cat. # RK5390) or tablet (Cat. # RK5400). They are convenient to use and are as effective as the free acid form at the same concentration.

Directions for use

Guidelines for use (for 1 plate)

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

1. Dissolve 1 vial of Cat. # 288652 in 0.3 mL of 1 M NaOH, and then diluted into 9.7 mL of HHBS (1X Hank's with 20 mM Hepes buffer, pH 7.0) to make a 25 mM stock solution.

Note: 1 mL of 25 mM stock solution is enough for 1 plate. Aliquot and store unused stock solution at -20 °C, protected from light. Avoid repeated freeze-thaw cycles.

2. Make 2.5 mM probenecid buffer: Add **1 mL** of 25 mM probenecid stock solution (from Step 1) to **9 mL** of HHBS with 0.02 to 0.04% Pluronic® F-127, and mix them well.

FT-288652

3. Make dye-loading solution for one cell plate: Add DMSO reconstituted fluorescent calcium dyes (such as Indo-1 AM, Fura-2 AM, Fluo-3 AM, Fluo-4 AM, Fluo-8 AM, Rhod-2 AM and Rhod-4 AM) into 2.5 mM probenecid buffer (from Step 2), and mix them well. The working solution is stable for at least 2 hours at room temperature.

References

- **Bimboese P. et al.**, Isoform-specific Regulation of the Inositol 1,4,5-Trisphosphate Receptor by O-Linked Glycosylation, *J. Biol. Chem.*, 286: 15688 - 15697 (2011) [Abstract](#)

Technical and scientific information

Related / associated products and documents

See [Products Highlights](#), [BioSciences Innovations catalogue](#) and [e-search tool](#).

- Probenecid, Water soluble, [288653](#)
- ReadiUse Probenecid, 25mM stabilized aqueous solution, [RK5390](#)
- ReadiUse Probenecid, sodium salt tablet, water soluble, [RK5400](#)

Ordering information

[Catalog size quantities and prices may be found at www.interchim.com/](http://www.interchim.com/)

Please inquire for higher quantities (availability, shipment conditions).

For any information, please ask : FluoProbes® / Interchim; Hotline : +33(0)4 70 03 73 06

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