

FluoroQuest™ Anti-fading Kit II *Optimized for Plate Imaging*

Catalog number: 20003

Unit size: 1 kit

Component	Storage	Amount
Component A: Anti-fading Reagent	Refrigerate (2-8 °C), Minimize light exposure	1 vial
Component B: Assay Buffer (4 °C)	Refrigerate (2-8 °C)	1 vial (10 mL)

OVERVIEW

When exposed to excitation light, fluorescence intensity of dyes decreases due to their photooxidation or other photoreactions. There are very few fluorescent dyes that completely resist photobleaching. Frequently, when a section has been scanned repeatedly under strong excitation light, dyes could lose significant fluorescence signal before visual evaluation or photography can be accomplished. For examples, the photobleaching of fluoresceins (such as FITC-labeled antibodies) has become a major problem in fluorescence microscopy. In severe cases (such as phycoprotein-labeled bioconjugates), a fluorescence image of high resolution can not even be taken due to the extremely high photobleaching rate. Fluoroquest™ Anti-Fading Kit is to reduce the dye photobleaching rate, giving researchers longer observation time. The kit contains all the essential components that can be readily applied to imaging experiments. They are all premixed and ready-to-use solutions. This kit is designed for microplate format while #20001 is designed for slide format.

AT A GLANCE

Protocol summary

1. Prepare samples (microplate wells)
2. Remove the liquid from the plate
3. Add 100 µL/well of antifading solution
4. Examine the specimen under microscope

KEY PARAMETERS

Instrument:	Fluorescence microscope
Excitation:	Varies
Emission:	Varies
Recommended plate:	Black wall/clear bottom

PREPARATION OF STOCK SOLUTIONS

Unless otherwise noted, all unused stock solutions should be divided into single-use aliquots and stored at -20 °C after preparation. Avoid repeated freeze-thaw cycles.

1. Anti-fading stock solution:

Add the entire vial of Assay buffer (Component B) to the vial of Anti-fading Reagent (Component A).

Note It is still OK to use when the solution goes brown, but discard when the solution is black.

PREPARATION OF CELL SAMPLES

For guidelines on cell sample preparation, please visit

<https://www.aatbio.com/resources/guides/cell-sample-preparation.html>

SAMPLE EXPERIMENTAL PROTOCOL

1. Remove any excess liquid from your 96-well plate.
2. Add 100 µL of Anti-fading solution to each selected wells.

3. Samples can be imaged immediately after apply the Anti-fading solution. A typical image is shown in Figure 1.

4. Store the plate at 4°C in the dark for optimum sample longevity.

EXAMPLE DATA ANALYSIS AND FIGURES

Example data analysis and images of this product can be found on the web at: <https://www.aatbio.com/products/fluoroquest-anti-fading-kit-ii-optimized-for-plate-imaging>

DISCLAIMER

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