# FITC-Palmitate Conjugate

Catalog number: 22192
Unit size: 5 mg

| Component | Storage | Amount (Cat No. 22192) |
|---|---|---|
| FITC-Palmitate Conjugate | Freeze (< -15 °C), Minimize light exposure | 5 mg |

## OVERVIEW

FITC-Palmitate Conjugate is a highly hydrophobic fatty acid lipid that is tagged with fluorescein. Palmitic acid is a saturated C16 fatty acid that can interact well with the hydrophobic cell membranes or lysosome membranes. Fluorescein-modified palmitic acid has strong green fluorescence that can well be imaged with the standard FITC filter set. AAT Bioquest also offer other dye-labeled lipids, such as phospholipids, sphingolipids, sterols, glycerolipids, and others.

## KEY PARAMETERS

**Fluorescence microscope**

| | |
|---|---|
| Emission | FITC filter set |
| Excitation | FITC filter set |
| 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*

**FITC-Palmitate Conjugate stock solution**

Prepare a 5 to 10 mM stock solution by dissolving an appropriate amount of FITC-Palmitate Conjugate in DMSO.

**Note:** For example, to prepare a 5 mM DMSO stock solution dissolve 1 mg of the FITC-Pamitate conjugate in 235 µL of DMSO.

## PREPARATION OF WORKING SOLUTION

**FITC-Palmitate Conjugate working solution**

Prepare a 5 to 10 µM FITC-Palmitate conjugate working solution by diluting the stock solution in HHBS.

**Note:** Prepare a fresh working solution before use.

## SAMPLE EXPERIMENTAL PROTOCOL

The following protocol can be used as a guideline. If needed, optimize the protocol to achieve the desired results.

1. Culture cells as desired.
2. Remove cell culture medium.

   **Note:** Cell culture medium must be removed since it may interfere with the conjugate staining.
3. Add 100 µL of FITC-Palmitate Conjugate working solution per well.
4. Incubate the cells in the dark for 30 minutes at room temperature.
5. Remove the FITC-Palmitate Conjugate working solution and wash cells twice with HHBS.
6. Add HHBS buffer to the cells and observe the cells using a fluorescence microscope with a FITC filter set.
7. **Optional:** The cells can be fixed after staining.

## EXAMPLE DATA ANALYSIS AND FIGURES

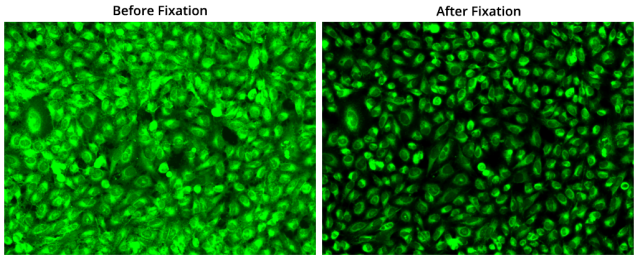


**Figure 1.** Image of Hela cells stained with FITC-Palmitate Conjugate and then fixed with 4% formaldehyde. Live Hela cells were cultured in a 96-well plate overnight, and the medium was removed before staining. 100 µL of the FITC-Palmitate conjugate (10 µM) in HH buffer was added to each well. Cells were stained for 30 minutes at room temperature, washed twice with HH buffer, and then fixed with 4% formaldehyde. The cells were imaged with a FITC filter before and after fixation.

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