LDS 651

Catalog number: 17566
Unit size: 5 mg

Component	Storage	Amount
LDS 651	Freeze (< -15 °C), Minimize light exposure	5 mg

OVERVIEW

LDS 651 is an analog of LDS 751. LDS 651 has almost identical intracellular staining pattern to LDS 751. LDS 651 is optimized to be excited by Violet Laser while LDS 751 is excited by Blue Laser at 488 nm. Both LDS 651 and LDS 751 are cell-permeant fluorescent dyes. Although both of LDS 651 and LDS 751 bind to DNA, they may be excluded from the nucleus and bind to other cellular structures such as the polarized membranes of mitochondria. Cautions need be taken when LDS 651 and LDS 751 are used for analyzing live cells and their fluorescence as being indicative of nuclear status. LDS 651 and LDS 751 might be used to separate red blood cells from nucleated cells.

KEY PARAMETERS

Flow cytometer

Excitation	488 nm laser
Emission	695/40 nm filter
Instrument specification(s)	PerCP channel

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.

LDS 651 stock solution
Prepare a 1 mM stock solution by adding the appropriate amount of DMSO.

Note Store the unused stock solution in small aliquots at -20 °C, protected from light.

PREPARATION OF WORKING SOLUTION

LDS 651 working solution
Dilute the 1 mM LDS 651 stock solution to 1 to 10 µM LDS 651 working solution in the buffer of your choice.

Note Prepare the working solution immediately before use.

Note The LDS 651 working solution should not be stored or reused.

Note The concentration of the LDS 651 working solution should be optimized for different cell types and conditions.

SAMPLE EXPERIMENTAL PROTOCOL

The following sample protocol is provided as a basic guide for the development of your own staining protocol. The concentrations of the reagents required for the optimal staining may vary depending on the density of cells (i.e. Leukocytes) and other materials in the sample.

1. Add the LDS 651 working solution in samples.
2. Incubate the samples at 37 °C for 5-10 minutes.
3. Set a fluorescence threshold to detect cells stained positive with LDS-651, thus excluding erythrocytes and unbound single platelets from the display.

EXAMPLE DATA ANALYSIS AND FIGURES

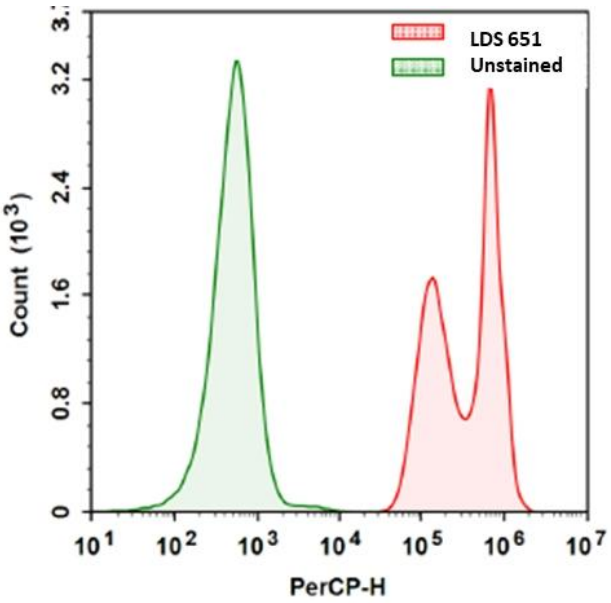

Figure 1. Flow cytometric analysis with LDS 651. Jurkat cells were stained with LDS 651 as per the protocol and response was measured with NovoCyte flow cytometer using PerCP channel.

DISCLAIMER

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