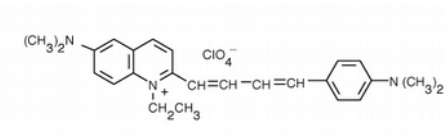
FT-97384A

LDS 751

Long wavelength cell-permeant nucleic acid dye for multilabeling application

Product Description

Name :	**LDS 751** Quinolinium, 6-(dimethylamino)-2-[4-[4-(dimethylamino)phenyl]-1,3-butadienyl]-1-ethyl, perchlorate Styryl 8
Catalog Number :	FP-973841 25 mg FP-97384A 1 g
Structure :	$C_{25}H_{30}ClN_3O_4$ CAS [181885-68-7]
Molecular Weight :	MW= 471.98
Solubility:	DMSO, EtOH
Absorption / Emission :	$\lambda_{exc}\backslash\lambda_{em}$ (H_2O/DNA) = 543 / 712 nm $\lambda_{exc}\backslash\lambda_{em}$ (RNA) = 590/607 nm
EC (M^{-1} cm^{-1}) **:**	46 000



Storage: Room temperature Protect from light and moisture

Introduction

The vital, nucleic acid stain (LDS-751) can be used to discriminate intact from damaged cells in a flow cytometer. Three major cell populations with different fluorescence properties with LDS-751 is found in the fixed samples. Cells not staining or only dimly staining with LDS-751 are identified as cells without nucleus (erythrocytes, platelets). Cells staining with intermediate amounts of LDS-751 are found to be intact cells, while cells intensively stained are identified as damaged cells. The spectral properties of this dye permit excitation at 488 nm with emission in the far red portion of the spectrum. This allows two-color immunofluorescence to be combined with the intact/damaged cell discrimination on fixed samples. Therefore, intact single cells can be distinguished during flow cytometric analysis, increasing the accuracy of the immunofluorescence measurements.[3]

Directions for use

Guidelines for use

Stock solution can be prepared at 1 mM in anhydrous DMSO.
Working solution: 4-10 ng/mL
Incubation time: 5-20 min.

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Protocols

Detection of Neutrophil-Platelet Conjugates by Flow Cytometry[1]

- Stains leukocytes with LDS-751 (10 µg/mL) for 5 minutes at 37°C
- Detect in the red (FL3) fluorescence channel
- Set a fluorescence threshold to detect cells that stained positive with LDS-751, thus excluding erythrocytes and unbound single platelets from the display

Telomere Length Analysis by Fluorescence In Situ Hybridization and Flow Cytometry[2]

- Hybridizes cells with or without telomere-specific FITC conjugated probe (# AQ5900)
- Washes, and counterstains with 0.01 µg/ml LDS 751
- To converts the specific fluorescence (fluorescence measured in cells hybridized with the FITC-labeled telomere probe minus the autofluorescence of unstained cells) into kilobase telomere length, processes an internal standard with a known telomere length and analyzes simultaneously with each sample.

* Styryl 8 is not the same as Lambda Physik's Styryl 8

References

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Related products

- Annexin V – FluoProbes 488, FP-BH9390
- Annexin V- R-Phycoerythrin, FP-AH191A
- Annexin V- AlloPhycoCyanine, FP-AK194A
- Propidium iodide, FP-36774A

Ordering information

Catalog size quantities and prices may be found at 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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