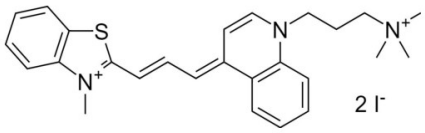
FT- 263442

DeadPRO-3 Iodide

Carbocyanine monomer nucleic acid stain with far-red fluorescence, used as nuclear counterstain and dead cell indicator

Product Information

Name :	**DeadPRO-3 Iodide Far-Red Nucleic Acid Stain, 1mM Solution in DMSO**
	NucGel XVII (642/661), Quinolinium, 4-[3-(3-methyl-2(3H)-benzothiazolylidene)-1-propenyl]-1-[3-(trimethylammonio)propyl]-, diiodid, TO-PRO®-3 Iodide (642/661) *Trademark of Molecular Probes®*
Catalog Number :	FP- 263442, 1 ml
CAS :	157199-63-8
Structure :	$C_{26}H_{31}I_2N_3S$
Molecular Weight :	671.43
Absorption / Emission :	$\lambda_{exc}\backslash\lambda_{em}$ = 642 / 661 nm
Solubility :	PBS, HEPES or other buffer



Storage: -20°C (1 year) . Protect from light and moisture

Introduction

DeadPRO™-3 Iodide is a carbocyanine dimer with far-red fluorescence similar to $CY_{anine}5$ dyes. It is cell-impermeant and easily distinguished from fluorescein and rhodamine as a nuclear counterstain and dead cell indicator. It is non-fluorescent in the absence of nucleic acids, and generates a very bright fluorescence signal upon binding to DNA. DeadPRO™-3 gives strong and selective nuclear staining in cultured cells and in paraffin sections. Simultaneous labeling with cell-permeable DMAO Nuclear Green dye and cell-impermeant DeadPRO™-3 can be used to assess cell viability.

Directions for use

Preparation of working solution
Make DeadPRO™-3 Iodide working solution in buffer of your choice at your desired concentration.

Note In initial experiments, it may be best to try several dye concentrations to determine the optimal concentration that yields the desired result. High dye concentration tends to cause nonspecific staining of other cellular structures.

Sample Experimental Protocol

Caution: The following protocol can be adapted for most cell types. Growth medium, cell density, the presence of other cell types and factors may influence staining. Residual detergent on glassware may also affect staining of many organisms, and cause brightly stained material to appear in solutions with or without cells present.

1. Grow and treat cells as desired.
2. Remove the cell culture medium.
3. Add DeadPRO™-3 working solution (1 to 10 µM) into the cells (either suspension or adherent cells), and stain the cells for 15 to 60 minutes.
4. Remove the dye working solution and add buffer of your choice.
5. Analyze the cellular staining with a fluorescence microscope using $CY_{anine}5$ filter.

Related products

- DMAO, #FP-CA8150
- PBS, 1X Sterile, pH 7.4, #N13523
- HEPES, 1M Sterile solution, PH 7.3 #N1466B

References

[1]. **Bosch L**, *et al*. Application of the 6-aminoquinolyl-N-hydroxysccinimidyl carbamate (AQC) reagent to the RP-HPLC determination of amino acids in infant foods. *J Chromatogr B Analyt Technol Biomed Life Sci*. 2006;831(1-2):176-183.
[2]. **Cohen SA**, *et al*. Applications of amino acid derivatization with 6-aminoquinolyl-N-hydroxysuccinimidyl carbamate. Analysis of feed grains, intravenous solutions and glycoproteins. *J Chromatogr A*. 1994;661(1-2):25-34.
[3]. **Salazar C.** *et al*., An UPLC-ESI-MS/MS Assay Using 6-Aminoquinolyl-N- Hydroxysuccinimidyl Carbamate Derivatization for Targeted Amino Acid Analysis: Application to Screening of Arabidopsis thaliana Mutants, *Metabolites* 2, 398-428 (2012)
[4]. **Undiganalu G. Yathisha** *et al*., Isolation and characterization of ACE-I inhibitory peptides from ribbonfish for a potential inhibitor of the main protease of SARS-CoV-2: An in silico analysis, *Proteins* 1–11 (2021)

Ordering information

Catalog size quantities and prices may be found at http://www.fluoprobes.com
Please inquire for higher quantities (availability, shipment conditions).

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