PROTOCOL

Product : **DRAQ5™**

Product No. : BOS-889-001-R200 **Batch No.** :

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Technical Details, Sample Preparation and Analysis

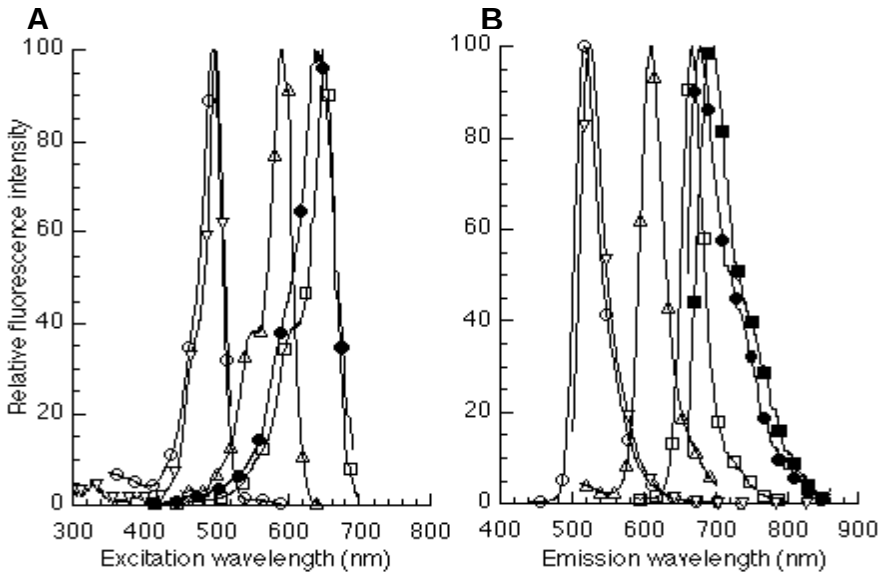
1. To use DRAQ5™ with living cells, add at concentrations of 1-20 µM (preferably at 10 or 20 µM for cells at a density of 4 x 10^5/ml) by direct addition to culture medium or buffer. DNA staining occurs also at room temperature but is very rapid (approx 1-3 min) at 37°C.

2. Flow cytometry applications can use the standard 488 nm or 633 nm excitation modes and filter configurations available on bench-top instruments, or 647 nm excitation available on research cytometers. Suggested optimal emission filters are 695LP, 715LP or 780 LP. Combining DRAQ5™ with FITC does not require fluorescence compensation unlike applications using propidium iodide. Whole blood preparations can be stained directly using DRAQ5™. A 200 µl staining reaction at 20 µM DRAQ5™ permits 250 assays for each vial supplied.

3. This particular formulation of DRAQ5™ should be considered as a DNA stain for living cells (or fixed cells) which upon equilibrium can be used to measure cell cycle distribution or nuclear integrity. Cell sorting is not recommended for viable cells since the persistence of DRAQ5™ on cellular DNA is ultimately cytotoxic.

4. For imaging as a marker for cell nuclei in immunocytochemistry (using laser excitation of 568 nm, 633 nm or 647 nm wavelengths) use at a concentration of 1-20 µM. Cells can be mounted directly in DRAQ5™ dye and imaged immediately. A 100 µl staining reaction at 5 µM DRAQ5™ permits 2000 assays for each vial supplied.

5. **Use safe handling procedures** (MSDS is available upon request). DRAQ5™ is a DNA binding chemical with potentially mutagenic properties as with other DNA intercalators.



Excitation spectra A:
DRAQ5™ (●, 670 nm emission)
FITC (○, 530 nm emission),
Rhodamine 123 (▽,530 nm emission),
Texas Red (△ ; 660 nm emission),
Cy 5.18 (□, 715 nm emission)).

Emission spectra B:
DRAQ5™ (●, 647 nm excitation)
DRAQ5™ plus DNA (■ , 647nm excitation)
FITC (○, 488 nm excitation)
Rhodamine 123 (▽, 488 nm excitation)
Texas Red (△ , 500 nm excitation)
Cy 5.18 (□, 570 nm excitation)

Date : October 8, 2001 Signed :