

ReadiUse™ DRAQ5 Staining Solution *5 mM in Water*

Ordering Information

Product Number: 17558 (50 µL)

Storage Conditions

Keep at 2-8 °C and avoid exposure to light

Spectral Properties

Ex= 601/646 nm, Em = 701nm

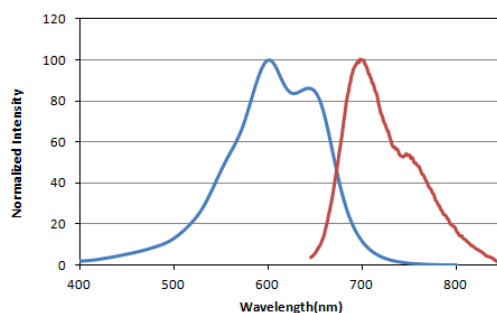


Figure 1. Excitation and emission spectra for the ReadiUSE™ DRAQ5 bound to DNA in Tris Buffer (pH=8.0)

Biological Applications

DRAQ5™ is a far-red DNA stain for live or fixed cells, and it can be readily used for multiplexing with other fluorophores, such as cells expressing green fluorescent protein (GFP) fusion proteins. It is lipophilic and membrane permeable dye for live-cell and fixed-cell staining and quantitation of DNA content. It is also ideal for use alongside other fluorophore reporters for fluorescence microscopy or high-content screening (HCS). Due to its far-red excitation and emission, DRAQ5 Stain can be multiplexed with many other fluorophores. It is commonly chosen to counterstain nuclei and measure DNA content in cell proliferation studies involving cells expressing GFP. DRAQ5 is compatible with many existing protocols across a wide range of instrumentation platforms. AAT Bioquest offers this ready to use solution to facilitate your fluorescence imaging and flow cytometric tests. (DRAQ5™ is the trade mark of Biostatus Ltd).

Sample Protocol for Cell Staining

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.

1. Add 2 to 10 µM into the cells (either suspension or adherent cells), and stain the cells for 15 to 60 minutes. 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.
2. Directly analyze the cellular staining with a fluorescence microscope, a fluorescence microplate reader, or flow cytometer. Analyze live cells within 2 h. DRAQ5 stains live, fixed, and dead cells.