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NuCyclTM PI Kit - Summary Factsheet

Cat.#10 -05-16312:50 Test

NuCyclTM PI:

1. Vial containing 50 ml of NuCycl PI with RNase -50 Tests
2. 2.50 NuCycl Sample Preparation Filters -50 Filters
3. 3.1 vial NuCycl DII.0 Standard -5 Tests
4. 4.1 Instruction Manual -1 manual

Materials Required But Not Provided By Biocarta

Materials needed for *Biocarta's* NuCycl PI Kit:

- Flow Cytometry Instrument or DNA Analyzer
- Test Tubes compatible with Instrument or Analyzer
- Calibrated Liquid handling device or pipette capable of accurately delivering 1 ml of
- NuCycl reagent to samples and standards.

Fluorescence Information and Equipment Specifications:

NuCycl PI:

- Excites at 300 -380 nm and 440 -580 nm
- Emits at 560 -680 nm

Assay Procedures:

NuCycl PI (Propidium Iodide) - DNA stain procedure. NuCycl PI allows the rapid isolation of nuclei from cells and tissues. NuCycl PI stains only DNA.

Assay Procedure: The following procedure is recommended for the preparation of cells or tissues for DNA Flow Cytometry. Set instrument or analyzer for DNA analysis. See instrument manufacturers instructions for proper DNA procedure.

Note: *Biocarta* recommends that the NuCycl Sample Preparation filters be used for the preparation of all samples and standards to be run. NuCycl Sample Preparation Filters remove background noise and allow for tighter CV's and hence better sensitivity than would otherwise be possible.

Fresh or Frozen Tissue Procedure:

1. Fresh or frozen tissues are trimmed to remove necrotic or normal tissue components, e.g. fat, connective components, etc.
2. Tissues are teased with two small blades (No. 10) scalpels in a small petri dish (35 - 50 mm diameter) with NuCycl PI at a relative concentration of 2 -3 mm³ tissue/one ml of NuCycl PI. Tissue samples as small as 2 mm in diameter may be used with 1 ml of NuCycl PI.

3. Pipette the sample into a test tube and incubate the sample for 20 minutes at 37 °C in an incubator or 37 °C water bath.
4. The stained nuclei and debris are separated from each other using the specially designed funnel filter provided. Place a test tube or sample cup on ice in which the nuclear suspension is to be collected. Place the funnel filter into the test tube or sample cup while still on ice and add the sample to the top portion of the funnel. Collect the stained sample in the test tube or sample cup and store on ice. **Note:** It is essential that *Biocarta's* specially designed funnel filters be used for all applications in order to achieve optimal results.
5. The sample is now ready for immediate DNA flow cytometric analysis.

Kit Storage and Expiration Dating:

NuCycl PI should be stored at 4 -8 °C until the expiration stamped on the outside of the kit box.

References:

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