



Exalpa Biologicals, Inc.

# NuCycl™ PI KIT SUMMARY FACTSHEET

## NUCYCL PI KIT CONTENTS

Cat.# 7033

- |    |  |            |
|----|--|------------|
| 1. | 1 vial containing 50 ml of NuCycl PI with RNase      | 50 Tests   |
| 2. | 50 <b>Improved</b> NuCycl Sample Preparation Filters | 50 Filters |
| 3. | 1 Instruction Manual                                 | 1 manual   |

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## MATERIALS REQUIRED BUT NOT PROVIDED BY EXALPHA

### Materials needed for Exalpa'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.

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## FLUORESCENCE INFORMATION AND EQUIPMENT SPECIFICATIONS:

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|-----------|---|
| NuCycl PI | - Excites at 300 - 380 nm and 440 - 580 nm. |
|           | - Emits at 560 -680 nm.                     |

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## ASSAY PROCEDURES:

<<<<< NuCycl PI >>>>>

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:** Exalpa 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 mm<sup>3</sup> tissue/one ml of NuCycl PI. Tissues 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<sup>o</sup> C in an incubator or 37<sup>o</sup> C water bath.

**For research use only. Not for use in human diagnostics or therapeutics.**

4- The stained nuclei and debris are separated from each other using the specially designed filter tubes provided. Place filter tube on ice and add the sample to the top portion of the funnel. Remove the filter cap from tube and store on ice.

**NOTE:** It is essential that Exalpha's specially designed filter tubes be used for all applications in order to achieve optimal results.

5. The sample is now ready for immediate DNA flow cytometric analysis.

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**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.

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