

COULTER DNA Prep Reagents Kit

REF 6607055 - 100 tests

PN 4238055-CA



REAGENTS FOR CELL LYSING, PERMEABILIZING AND DNA STAINING FOR ANALYSIS ON FLOW CYTOMETERS

For Research Use Only.
Not for use in diagnostic procedures.

PRODUCT DESCRIPTION

COULTER DNA PREP Reagents Kit is used in the preparation of intact cells and isolated cell nuclei for the quantitative measurement of cellular deoxyribonucleic acid (DNA) content by flow cytometry. The measurement is based upon the ability of propidium iodide to bind stoichiometrically to double stranded DNA under appropriate staining conditions. DNA stained in this manner will emit fluorescence in direct proportion to their DNA content. The flow cytometer measures the fluorescence from each stained cell as it passes through the laser beam. Flow cytometric analysis provides quantitative data and the ability to measure large numbers of cells rapidly.

REAGENTS

COULTER DNA PREP Reagents Kit,
PN 6607055 (100 tests)
DNA PREP LPR, 1 x 22 mL vial
DNA PREP Stain, 3 x 70 mL vials

REAGENT CONTENTS

DNA PREP LPR contains <0.1% potassium cyanide, <0.1% NaN₃, nonionic detergents, saline and stabilizers.

DNA PREP Stain contains 50 µg/mL propidium iodide (<0.5% propidium iodide), RNase [Type III-A, Bovine Pancrease (4 KU/mL)], <0.1% NaN₃, saline and stabilizers.

FLUORESCENCE:

Propidium Iodide Excites at 488 nm
Emits at 560-680 nm

STATEMENT OF WARNINGS

1. The stain reagent contains propidium iodide. Propidium iodide is a mutagenic agent and a suspected carcinogen and should be handled with caution. Liquid impervious gloves should be worn whenever handling this reagent.
2. The lysing reagent contains potassium cyanide. Contact of this reagent with acid may liberate poisonous gas. Avoid contact with acid.
3. These reagents contain sodium azide. Sodium azide under acidic conditions yields hydrazoic acid, an extremely toxic compound. Azide compounds should be flushed with running water while being discarded. These precautions are recommended to avoid deposits in metal piping in which explosive conditions

can develop. If skin or eye contact occurs, immediately wash excessively with water.

4. Specimens, samples, and all material coming in contact with them should be handled as if capable of transmitting infection and disposed of with proper precautions.
5. Never pipet by mouth and avoid contact of samples with skin and mucous membranes.
6. Do not use reagents beyond the expiration date on the vial labels.
7. Minimize exposure of reagent to light during storage or incubation.
8. Avoid microbial contamination of reagents to avoid incorrect or misleading results.
9. The flow cytometer must be prepared and maintained according to the Product Manuals. Verify alignment using 10 µm fluorospheres (Flow-Check Fluorospheres). Half-peak CV must be less than 2% for red fluorescence.
10. Use Good Laboratory Practices (GLP) when handling these reagents.

STORAGE CONDITIONS AND STABILITY

These reagents are stable to the expiration date on the vial labels when stored unopened at 2-8°C. These reagents should be brought to a temperature of 20-25°C prior to use. Do not freeze. Minimize exposure to light. Opened bottles remain stable for 60 days when stored at 20-25°C.

EVIDENCE OF DETERIORATION

Any change in the physical appearance of these reagents or any major variation in values obtained for control samples may indicate deterioration and these reagents should not be used.

Normal Appearance of the Reagents:

LPR - clear, light-brown liquid

Stain - clear, pinkish-red liquid

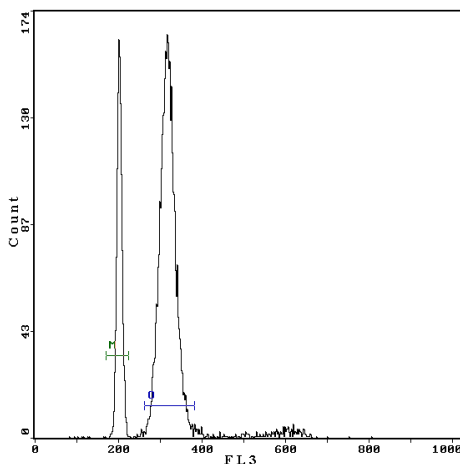
REAGENT PREPARATION

No preparation is necessary. These COULTER DNA PREP Reagents are used directly from their vials.

USAGE

These reagents are for use with standard flow cytometry methodologies using the COULTER DNA PREP Workstation.

Figure 1. Single parameter histogram of COULTER INDEX DNA Abnormal Control (PN 6699500) stained with COULTER DNA PREP Reagents Kit and acquired on an Epics XL-MCL.



SELECTED REFERENCES

1. Crissman HA and Steinkamp JA. 1973. Rapid, simultaneous measurement of DNA, protein, and cell volume in single cells from large mammalian cell populations. J Cell Biology 59:766-771.
2. Vindelov LL, Christensen IJ and Nissen NI. 1983. Standardization of high-resolution flow cytometric DNA analysis by the simultaneous use of chicken and trout red blood cells as internal reference standards. Cytometry 3:328-331.
3. Shapiro HM: 1995. Practical Flow Cytometry. Extrinsic Parameters. Third Edition, New York: Wiley-Liss, p. 251-262.
4. Hedley DW, Shankey TV and Wheelless LL. 1993. DNA Cytometry Consensus Conference. Cytometry 14:471-500.

PRODUCT AVAILABILITY

COULTER DNA PREP Reagents Kit
REF 6607055 (100 tests)

TRADEMARKS

Beckman Coulter logo and COULTER are trademarks of Beckman Coulter, Inc.; Beckman Coulter and COULTER are registered in the USPTO and SIPO.

For additional information or if damaged product is received in the USA, call 800-526-7694. Outside the USA, contact your local Beckman Coulter Representative.

 Beckman Coulter
250 S. Kraemer Blvd.
Brea, CA 92821
www.beckmancoulter.com

Printed in USA
Made in USA

© 2011 Beckman Coulter, Inc.
All Rights Reserved.