



**World First “all in one solution” by best combination
of urine chemistry and flowcytometry in urinalysis
from ARKRAY!!**

Integrated Urine Analyzer



ARKRAY GLOBAL BUSINESS INC.

Reliability

Combination of technologies give a better picture.

AU-4050 integrates urine chemistry analysis by proven ARKRAY technology and urine particle analysis by flowcytometry technology together with the specific dye and dedicated detection channels.

This makes it possible to provide the clinical

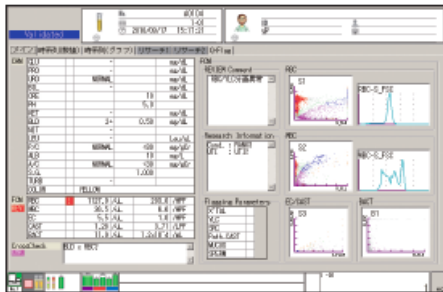
laboratory with total picture of urine

sample. Combination of two different methodologies

improves screening efficacy and quality of

interpretation in the test results for urologists or

nephrologists.

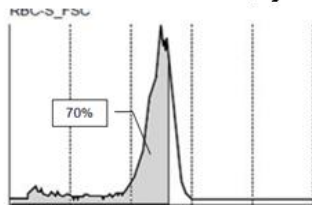


< Primary Screen >

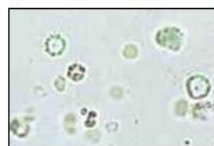
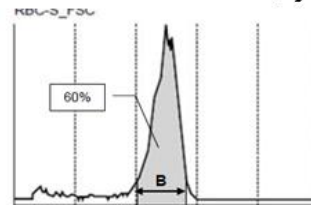
Precise counting and sizing in RBC

Identification of hematuria type being a major challenge in microscopic approach as its variety of size and shape. Quality of report are affected by the skills and experiences of the examiners since standardization of microscopic approach being difficult. AU-4050 utilizes the histogram analysis by using flowcytometric RBC counts which being used for the blood cell counters. Histogram analysis is performed by using RBC counts gives "RBC Info."

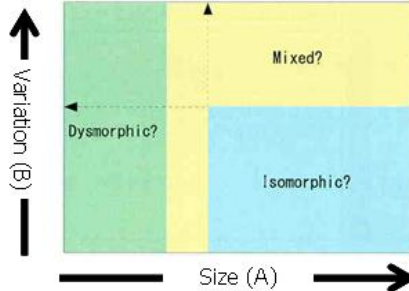
- Index of RBC size (A)



- Index of RBC variation (B)



Dysmorphic RBC



Isomorphic RBC

Versatility

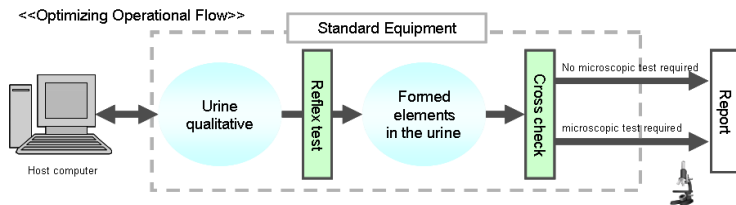
Easy operation via sophisticated Information Processing Unit

GUI based operation of information processing unit meets variety of modern laboratory demand for laboratory management.

The screenshot shows a complex GUI interface for a laboratory information system. It includes several key components:

- Numeric report:** A table of test results for various parameters such as GLU, PRO, URO, BIL, CRE, PH, KET, BLD, NIT, LEU, P/C, ALB, A/C, S.G., TURB, and COLOR.
- Sample Information:** Fields for patient name (A0104), ID (1-01), and date/time (2010/09/17 15:17:21).
- Flowcytometry graphic report:** Multiple scatter plots (S1, S2, S3) and histograms (RBC-S_FSC, WBC-S_FSC, B1) showing cell populations.
- Message:** A notification area at the bottom left showing a 'CrossCheck' message: 'BLD x REC?'.
- Reagent Monitor:** A bar chart at the bottom center showing reagent levels for various components.

Optimizing Workflow in urinalysis



High skills and experience for manual microscopy are required in urinalysis. To increase the efficacy of laboratory while maintaining the quality is major issue in modern laboratory. AU-4050, integrated urine analyzer, streamlines the operational workflow in your laboratory while improving the quality of your operation with high screening efficiency.

Specifications

Parameters	<ul style="list-style-type: none">• Urine Chemistry Analysis(by reagent strips): GLU, PRO, BLD, BIL, pH, KET, NIT, LEU, CRE, μALB, A/C ratio, P/C ratio• Urine Chemistry Analysis(by instrument): Specific Gravity, Turbidity, Color• Urine Cell Analysis(Quantitative Parameters): RBC, WBC, EC, CAST, BACT• Urine Cell Analysis (Flagging Parameters): X' TAL, YLC, SRC, Path. CAST, MUCUS, SPERM• Urine Cell Analysis (Quantitative Parameters for Research Purpose) X' TAL, YLC, SRC, Path. CAST, MUCUS, SPERM, Conductivity• Urine Cell Analysis(Analytical Parameters for Research Purpose) RBC Morphological Information, Urine Concentration, UTI
Throughput	<ul style="list-style-type: none">• Approx. 150 samples/hour• Cycle Time: Urine Chemistry Module : 18 sec/tests(approx. 200samples/hour) Urine Sediment Module: 36 sec/tests(approx. 100samples/hour)
Sample	Whole human urine
Sample Volume	5mL For Urine Chemistry : 2mL For Urine Sediment : 4mL
Data	Test Results : 10,000 (Sediment/Chemistry/QC results) QC Chart 24 files (300 points/file) Test Orders : 3,000 orders Patient Demographics : 5,000 Doctor Profile : 100 Ward : 100 Error Log : 3,000 Operation Log : 3,000 Maintenance Log : 1,000 Reagent Log : 1,000
Sample ID	15 digits
Load Capacity	60 sample tubes (10 x 6 sample racks) with continuous loading
Power	Main Unit: AC100V—240V、600VA

* Above specifications are subject to be changed through the development phase and review without any notice.