Fighting Disease with Electronics

NIHON KOHDEN

CELLTAC PRODUCT LINE

AUTOMATED HEMATOLOGY ANALYZERS

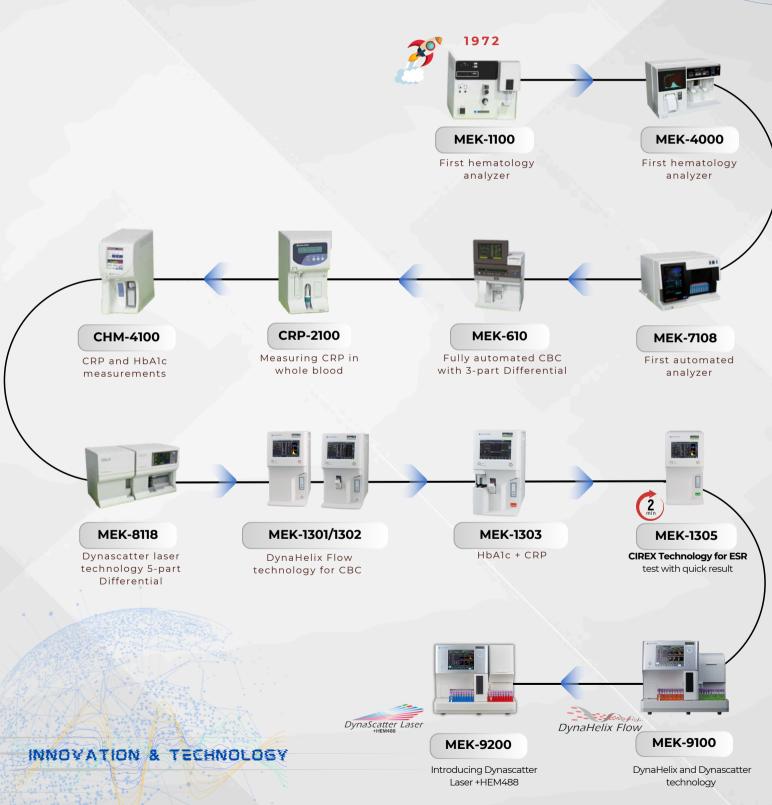


Better laboratory operations





HEMATOLOGY PRODUCTS SINCE 1972



made in Japan

IMPROVING LABORATORY WORKFLOW

CORE VALUES OF NIHON KOHDEN



Integrity

We act with high ethical standards to save the lives of many.



Customer Centric

We take every action to improve the experience of patients and customers.



Diversity

We respect and leverage individual strengths to maximize our potential.



Goal Oriented

We focus on reaching our destination and explore possibilities to get there.



Creativity

We imagine new ideas and solutions to create unprecedented value.



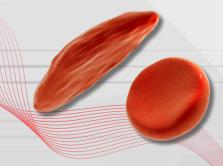
Initiative

We communicate and contribute proactively to meet challenges.



Humbleness

We approach issues with an open mind and seek out objective facts.





HEMATOLOGY ANALYZERS

Nihon Kohden's Hematology products have become proven reliable solutions across the global market. We provide complete solutions for all laboratory sizes, from medium to large with innovative technologies and a focus on high quality. We deliver reliable and accurate results to help medical professionals make accurate diagnoses.

We believe that by utilizing our expertise and experience, we can support hematology practitioners in their clinical activities. This is done by providing them with superior analyzers and services to make their lives easier with the ultimate goal of improving their patients' health.



5-PART DIFF

TRANSFORMING THE POSSIBILITY OF IVD SOLUTIONS

5-part Differential Hematology Analyzers

CelltacG+

MEK-9200



5-part differential with RET

39 parameters

90 samples per hour for differential measurement

Integrated validation station with touch screen

Smart ColoRac Match system



Reportable Parameters:

WBC, RBC, HGB, HCT, MCV, MCH, MCHC, RDW-CV, RDW-SD, PLT, PCT, MPV, PDW, P LCR, NE, NE%, LY, LY%, MO, MO%, EO, EO%, BA, BA%, P-LCC, RET, RET%, IRF, LFR, MFR, HFR



Research Parameters:

Mentzer Index, RDWI, IG, IG%, Band, Band%, Seg, Seg%



MEK-9100



5-part differential

33 parameters

90 samples per hour

Continuous loading of samples

Smart ColoRac Match system



Reportable Parameters:

WBC, RBC, HGB, HCT, MCV, MCH, MCHC, RDW-CV, RDW-SD, PLT, PCT, MPV, PDW, P-LCR, NE, NE%, LY, LY%, MO, MO%, EO, EO%, BA, BA%



Research Parameters:

P-LCC, Mentzer Index, RDWI, IG%, IG#, Band%, Band#, Seg%* Seg#



MEK-7300K



5-part differential

25 parameters

10.4- inch TFT-LCD

Open/Closed/Pre-dilution/WBC high/WBC low/ Capillary

Advanced count for low PLT or WBC



Reportable Parameters:

WBC, NE%, LY%, MO%, EO%, BA%, NE, LY, MO, EO, BA, RBC, HGB, HCT, MCV, MCH, MCHC, RDW-CV, RDW-SD, PLT, PCT, MPV, PDW



Research Parameters:

IG#, IG%

Unique Technology

CelltacG+ newly integrated reticulocyte parameters were identified through our unique technology, DynaScatter Laser +HEM488. The new laser technology has two laser units one of them is a blue laser with 488 nm wavelength.

It excites stained cells and identifies reticulocytes based on the fluorescent scattered light.



For Reticulocyte Measurment

> DynaScatter Laser Technology was initially developed for 5-part differential with only one laser source. In CelltacG+, 488 nm blue laser was newly integrated into the technology for reticulocyte. Nucleic acid staining solution stains DNA and RNA. The stained cells are excited by the blue laser and fluoresces are generated. Cell size is calculated from forward scattered light, DNA information is calculated by green fluorescent light, and RNA information is calculated by red fluorescent light.

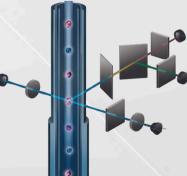
Additionally, fluorescent density is important to identify the amount of reticulocytes. It is analyzed from RNP method* minimizing the influence of interfering substances for more accurate reticulocyte measurement results.













Celltac G Smart ColoRac Match helps fast and easy location of clinically abnormal tubes by scanning failed barcoded tubes using the unique color-coded rack system that is associated with data management software on the analyzer. This unique user-oriented Smart ColoRac Match system enhances lab's efficiency without extra investment, extra space or special operator training.

The Smart ColoRac Match surely maximizes lab's productivity for faster and more accurate test reports.





- P: There are some items determined as positive
- **E**: Measurement error
- B: Barcode error



5-PART DIFF

FULLY AUTOMATED ANALYZERS

5-part Differential Hematology Analyzer

Innovation For Superior Reliability

The DynaHelix Flow technology perfectly aligns WBC, RBC, and PLT cells for high impedance counting precision using advanced hydrodynamic-focused sheath flow before passing through the aperture. In addition, the DynaHelix Flow prevents the risk of coincidence or count of blood cell re-entry into the aperture using a unique DynaHelix flow stream.



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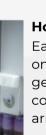
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Complete Hematology Platform



Status indicator

The indicator is located in the front panel and clearly illustrates different operating status of the analyzer. The operator can recognize the need for reagent replacement by looking at the status indicator turning red.



Homogeneous tube mixing

Each tube is picked up one by one from color-coded racks and gently mixed with built-in complete tube inversion mixing arm.







STAT mode

STAT and Pre-dilution modes analyze micro-samples such as pediatric blood collected from the earlobe or fingertip.
Celltac G provides solutions based on the true laboratory needs.

Extremely Simple Operation

An automated hematology analyzer with WBC 5-part differential measurement. The result of the WBC 5-part differential measurements are counted using laser scattering technology. Only 55 µL EDTA blood is required for the test, and the results come in around 1 minute.



Reliable

Enhanced statistics

"Advanced Count*" for low PLT or WBC enhances the reliability of low PLT or WBC.

*When low PLT or WBC is detected, an additional sample is analyzed automatically.

Friendly

Stress-free simple operation

Large color touch screen provides intuitive operation. Auto priming and self-cleaning minimize start-up and shutdown time.



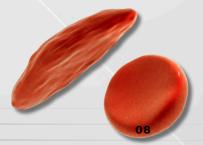
Effecient

Streamlined workflow

Just 55 μ L sample aspiration for WBC 5-part differential, 10 μ L/20 μ L can be measured with predilution mode.

Measurement modes:

Open, Closed, Pre-dilution, WBC high, and WBC low.





3-PART DIFF

TRANSFORMING THE POSSIBILITY OF IVD SOLUTIONS

3-part Differential Hematology Analyzers

Celltac α +

MEK-1303



3-part differential with HbAlc and CRP

26 reportable parameter including NLR

60 samples/hour with 50,000 internal data capacity

CBC: within 1 min (Open mode) within 1 min 30 s (Closed mode) CRP: within 3 min 40 s HbAlc: within 5 min 30 s



Reportable parameters:

WBC, LY%, MO%, GR%, LY#, MO#, GR#, RBC, HGB, HCT, MCV, MCH, MCHC, RDW-CV, RDW-SD, PLT, PCT, MPV, PDW, P-LCR, CRP, HbA1c

Celltac α

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MEK-1301/1302

3-part differential

24 reportable parameter including NLR

60 samples/hour with 50,000 internal data capacity

Open mode only (MEK-1301) Open and Closed mode (MEK-1302)



Reportable parameters:

WBC, LY%, MO%, GR%, LY#, MO#, GR#, RBC, HGB, HCT, MCV, MCH, MCHC, RDW-CV, RDW-SD, PLT, PCT, MPV, PDW, P-LCR

Celltac α +



MEK-1305

3-part differential with ESR

32 parameters including ESR

CBC + WBC 3 part differential: Approx. 60 samples/h CBC + WBC 3 part differential + ESR: Approx. 20 samples/h

езк. Арргох. 20 samples/п

Celltac 💢



MEK-6550

3-part differentail

21 parameters: dog, cat, cow, horse 13 parameters: rat, mouse, other animals

Optimum Threshold Search is available for custom animal types



Reportable parameters:

WBC, LY%, MO%, GR%, LY#, MO#, GR#, RBC, HGB, HCT, MCV, MCH, MCHC, RDW-CV, RDW-SD, PLT, PCT, MPV, PDW, P-LCR

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Reportable parameters:

WBC, LY%, MO%, GR%, EO%, LY#, MO#, GR#, EO#, RBC, HGB, HCT, MCV, MCH, MCHC, RDW-CV, RDW-SD, PLT, PCT, MPV, PDW

Operational Excellence







Reagent Management system helps easier reagent bottle management with a unique barcode label on each reagent.

Smart ColoRerun Assist helps to visually understand the reason for re-measurement by showing color-coded messages.

DynaHelix Flow technology aligns RBC and PLT cells for high-impedance counting precision using an advanced hydrodynamic-focused sheath flow before passing through the aperture.

A choice of two different models, depending on your needs

- > Celltac α has 2 different models; MEK-1301 and MEK-1302. MEK-1301 has open measurement mode and MEK-1302 has both open and closed measurement modes.
- The built-in cap piercing mechanism protects healthcare professionals from sample handling-related infection. It helps maintain a high standard of operating safety in the laboratory. Nihon Kohden MEK-1302 is equipped with this function which serves the needs of laboratories

during uncertain times such as

global pandemic.

> Built-in cap-piercing mechanism:





Celltac α

MEK-1302



(open mode only)

Individual HbA1c Test



It is important to monitor HbAlc for diabetic patients. MEK-1303 provides individual HbAlc test results*.

* In HbAlc measurement mode, only the HbAlc result is output.

NGSP Certified



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Common Hematology Test Results including CRP

In some cases, a CRP test may be required rather than an ESR test, as the markers used in each test behave differently depending on the stage and cause of the inflammation.

MEK-1303 provides common hematology test results including CRP through a single aspiration process.

- CRP as a Rapid Inflammation Marker
- Closed Mode for Safe Operation

Celltac α +

MEK-1303













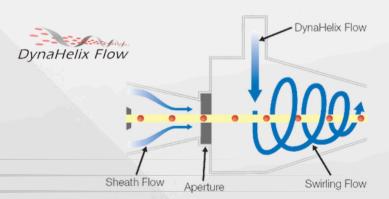
Integration: Transforming the possibility of IVD solutions

CiRHEX (Cell counter integrated rheometric excellence) technology can provide ESR results highly correlated with the Westergren method by using HCT value and MCV value from CBC measurement and also the RBC aggregation phenomenon.



Nihon Kohden's unique CiRHEX Technology helps you to achieve a better clinical outcome

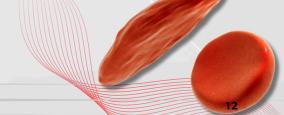
- Result displayed in 2 minutes by single EDTA tube for both CBC and ESR
- > Only 80 µL sample volume required for both CBC and ESR
- No additional reagents and no additional cost
- DynaHelix Flow technology perfectly aligns RBC and PLT cells for high impedance counting precision using an advanced hydrodynamic-focused sheath flow through the aperture.





MEK-1305





Gentle veterinary care



MEK-6550 provides accurate results in just 60 seconds. All relevant information including 21 parameters for dog, cat, cow, or horse, plus 3 histograms is displayed in color on one screen. This leads to more accurate diagnosis and faster intervention.



Accurate Diagnosis and Faster Intervention

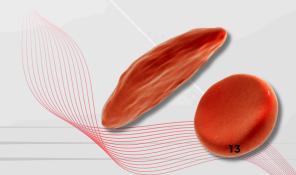
- Support faster clinical decision making
- > Reduce manual eye counting
 - Expandable animal setting: 6 preset animal types — dog, cat, cow, horse, rat, and mouse — plus 3 custom animal types allow you to automatically count for a wider range of animals.
 - · Panic value with recounting: When a measurement result exceeds the high or low panic values, the sample can be recounted at a different dilution.
- > Always be ready
 - Fully automatic cleaning and priming ensure that the analyzer is always ready to use. MEK-6550 provides you with immediate results to support quick clinical decisions.



MEK-6550









Hematology Reagents are hydrous solutions for diluting and/or treating blood samples. Nihon Kohden Celltac reagents are manufactured in our reagent Plant in Dubai, DAFZA. This plant was established in the year 2020.

Nihon Kohden uses highly purified fresh water of high-grade chemicals to create the reagents that meet the Ministry of Health and ISO requirements thereby enabling us to achieve one of the highest customer satisfaction in the Middle East and Africa.

CLEANAC 710 (MK-710WD)



CLEANAC 3 (MEK-620D)



CLEANAC 810 (MK-810W)



CLEANAC (MEK-520D)



HEMOLYNAC 5 (MEK-910D)



HEMOLYNAC 310 (MK-310WD)



ISOTONAC 4 (MEK-641D)



RETICULONAC (MK-110W)



HEMOLYNAC 3N (MEK-680D)











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