nizonPLUS
Cell Washer
PRODUCT GUIDE

HTA's nizonPLUS is an IVD medical device used to separate biological fluids.*

The nizonPLUS cell washer is an automated sample preparation device for lysis and separation (wash) of the liquid phase of blood (residual part of the lysis of red blood cells) from the solid phase (cells and white blood cells) for cytometric determination of marked cells.

Cell lysis takes place through the release of a programmable volume of an appropriate solution. Washing is performed through specimen centrifugation with subsequent cell sedimentation and supernatant, removing RBCs, platelets and other contaminations while preserving the white blood cells.

Up to 32 specimen tubes can be accommodated and processed in two batches of 16 tubes each directly on the 32 position MCL carousel compatible with Beckman Coulter's Epics XL, FC 500, Navios and Gallios cytofluorometers.

The nizonPLUS offers storing up to 10 methods (including two factory preset reference methods) and four modes of operation (lysis only, wash only, lysis&wash, double lysis). A touch screen user interface simplifies instrument control for novice and experienced users.

SAMPLE LOADING
Carousel Rack Compatibility
Beckman Coulter 32 position MCL carousel
Tube compatibility
Uncapped 12 x 75 mm polypropylene tubes

PERFORMANCE
Accuracy
Deviation of the Subset Percentages compared to manual preparation: ≤5% (typically observed: less than 3%)
Precision
Relative standard deviation on subsets: ≤5% (typically observed: less than 3%)
Medium Deviation between two instruments: ≤2.5% (typically observed: less than 2%)
WBC Recovery
After one wash: 91-101% (mean: 97%)
After two washes: 80-96% (mean: 88%)
Throughput
Typical throughput for 16 tubes (1 wash cycle)[1] : 38 min.
Typical throughput for 32 tubes (1 wash cycle)[1] : 76 min.
Typical throughput for 16 tubes (2 wash cycle)[2] : 52 min.
Typical throughput for 32 tubes (2 wash cycle)[2] : 104 min.

CUSTOM PROTOCOL PARAMETERS
Custom method storage
8 methods
Modes
Lysis only
Washing only
Lysis&Washing
Double lysis
Lysis parameters
Lysis source (Buffer, Lysing solution, TQ-Prep)
Lysis volume (1-2.5 mL with 0.1 mL steps)
Lysis time (0-99 minutes with 1 minute steps)
Washing parameters
Centrifuge cycles (1-9 washing cycles)
Centrifuge speed (50-300g in 50g steps)
Centrifuge time (1-10 min with 1 min steps)
Final volume (0.0-1.9 mL with 0.1 mL steps)

[1] Obtained with reference method 1 (Mode: Lysis&Washing, Lysis source: Lysing solution, Lysis Volume: 2mL, Lysis time: 15min, Centrifuge repetition: 1, Centrifuge speed: 250g, Centrifuge time: 3min, Final Volume: 1mL)

[2] Obtained with reference method 2 (The parameters are the same as the method 1, but Centrifuge repetition: 2)

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CAPACITY

Total sample capacity

Total samples on system: 32

Samples per batch/centrifuge: 16

Fluid capacity

Lysing solution: 250 mL

Washing solution: 500 mL

Waste Tank: 20 L

INSTALLATION

Dimensions (W x D x H)

530 mm x 780 mm x 700 mm

Weight

Centrifuge: 12 kg

Main unit: 15 kg

Total weight: 27 kg

Power specifications

Voltage: 100-240 +/-10% Vac

Frequency: 50/60Hz

Power: 120 W

Operating Conditions

Temperature: 15-35°C

Ambient humidity: 5%-80% (non condensing)

Maximum altitude: 2000 m

Noise

Maximum measured level 67 dbA

ACCESSORIES

Full waste detector

Complete Waste cap with sensor

LYSI can

Lysing solution can

BUFFER can

Buffer can w/o cap

Full LYSI can cap

Full Lysing solution can cap

Full BUFFER can cap

Tube rack

32 position rack with labels indicating the position

Waste container, 20 L

Container in plastic material, include in a cubical Cardboard

Syringe

Syringe 10 mL PTFE RN/82 mm/G19 Point-style:LC

Needle

Needle 82 mm/G19/Point:LC (2pcs/pk)

REAGENTS

IOTest 3 Lysing solution (Ammonium chloride)

Lysing solution

Flowclean Cleaning Agent

Washing liquid

Flow Count

Standard fluorospheres for absolute count

** Manufacturer: HTA s.r.l. -77-79, via del Mella, I-25131 Brescia (BS), Italy - Tel: +39 030 3582920 - E-mail: info@hta-it.com*

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For Beckman Coulter's worldwide office locations and phone numbers, please visit "Contact Us" at **beckman.com**

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