




**PRECISION MATTERS**

**PIIONEER TECHNOLOGIES FROM FINLAND**

**LABSYSTEMS**  
**DIAGNOSTICS**  
*speaking your language*



# LABSYSTEMS DIAGNOSTICS

CE

Newborn Screening

Point-of-Care

Immunology

Molecular Diagnostics

HPLC & LC-MS/MS

“

Labsystems Diagnostics is based in Finland and has been a forerunner in innovative diagnostic research and development for nearly 40 years, pioneering new technologies for newborn screening and point-of-care testing. Among the market leaders in newborn screening, our neonatal products save and improve the lives of babies in more than 70 countries. Being a one-stop solution provider for newborn screening, offering the most comprehensive and high quality screening kits, supported by best-in-class automation capabilities and user friendly software.

We have a strong record of technology leadership, including pioneering research to enable the early detection of diseases.

Labsystems Diagnostics was the first to:

- Develop fluorometric PKU (Phenylketonuria) tests for NBS
- Provide PKU assays in micro-plate format

We continue to invest in our R&D and are strongly committed to developing innovative newborn diagnostics solutions at our state of the art production facility in Vantaa, Finland.

Besides newborn screening, our core competencies and capabilities include point of care testing, molecular testing, immunoassay development, automated manufacturing and mass spectrometry solutions. With a thriving commercial organization around the world, Labsystems Diagnostics remains steadfast in serving its customers through high quality products and solutions that meet the required regulatory and safety standards.



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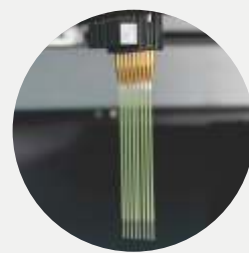
FULLY-AUTOMATED INSTRUMENT - NS2400



- High-end robotic platform to facilitate automatic processing of NBS assays
- High-throughput system with a maximum capacity of 25 plates
- A see-through system with "Freedom EVOware Plus" for process controlling
- Alarm activation facility in case of instrumental error or operational mistakes
- Compatible LabSystems FEIA-based NBS kits for NS2400 Automate / Modular system



High-Precision Robotic Manipulator (RoMa)



Unique Liquid Handling System (LiHa)

MODULAR SYSTEMS



- Compact foot prints
- Robust with high quality performance
- Can be accommodated onto the NS2400 to upgrade to an automated system
- Individual Modules can be used for other requirements in the Laboratory wherever needed

## NBS FEIA KITS

### Fluorometric Kits

- Neonatal hTSH FEIA Plus
- Neonatal T4 FEIA
- Neonatal 17-OH-Progesterone FEIA
- Neonatal IRT FEIA
- Neonatal Toxoplasma gondii IgM FEIA
- Neonatal Galactose
- Neonatal GALT
- Neonatal G6PD
- Neonatal Phenylalanine
- Neonatal Biotinidase



- All the necessary components for assay performance are provided in the kit
- Long shelf-life and CE marked
- Based on highly-sensitive fluorescence technology
- No additional measurement step or fluorescence enhancement solution required
- Compatible with both modular and NS2400 automated systems

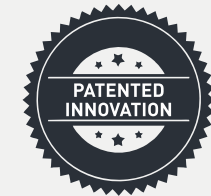
## NBS qPCR KIT

**SCID-SMA Multiplex Real-time PCR**  
 Rapid and simultaneous detection of severe combined immunodeficiency (SCID) syndrome and spinal muscular atrophy (SMA)



## NBS LC-MS/MS KITS

Expanded panel for Newborn Screening  
 Covering the entire Urea Cycle Disorder



### NeoMass AAAC

Separate protocol and separate injection for SUAC analysis

- Innovated and Patented technology capable of analysing both distal and proximal urea cycle giving a comprehensive screening of all urea cycle abnormalities
- Non-derivatized extraction method for all analytes including SUAC
- Widest panel of Amino acids containing Asp, Glu, Ser and Lys, enabling wider screening capabilities
- Three DBS controls covering the range from endogenous to abnormal levels → improved control over decision-making area

### NeoMass AAAC Plus

Single protocol and single injection for all analytes, including SUAC

- Upgraded and Advanced version of NeoMass AAAC
- Simultaneous determination of AA, AC, ASA and SUAC in a single run minimises the use of lab consumables and instrument run time, improving the overall lab productivity
- Shortest extraction time



### CAH - Steroid Profiling

Second-tier testing for congenital adrenal hyperplasia (CAH) in dried blood spot

- Second-tier testing to diagnose CAH by using LC-MS/MS in newborns
- Rapid and simultaneous quantitative determination of 17-OHP, Androstenedione, Cortisol 11-deoxycortisol, and 21-deoxycortisol
- Variable test kits to accommodate lab's need
- Single drop of blood sample is only required, avoiding the need of serum sample

## CELIAC TEST - HOME & PROFESSIONAL USE

- Simple and quick test procedure; Results in < 10 minutes
- Detection of total IgA reduces the risk of false negative due to rare IgA deficiency (Professional Test)
- Sensitivity 96,7% and specificity 93,5%

Biocard™ Celiac Home test 1T; Cassette  
 Biocard™ Celiac Professional test 10T; Cassette



Home Test kit



## INFECTIOUS DISEASES – PROFESSIONAL USE

- Extremely simple test procedure
- Sensitivity 100% and Specificity 87,5% / 95%
- Room Temperature storage for easy transportation
- Long shelf-life
- Suitable for remote testing conditions

Biocard Chlamydia pneumoniae IgM  
 Biocard Mycoplasma pneumoniae IgM



## HELICOBACTER PYLORI – HOME & PROFESSIONAL USE

- Simple and quick test procedure; Results in < 10 minutes
- Sensitivity 95,2% and specificity 95,5%
- Not interfered by antibiotic treatment unlike antigen or biopsy based test

Biocard™ H. pylori IgG Home test, 1T; Cassette  
 Biocard™ H. pylori IgG Professional test, 10T; Cassette  
 Biocard™ H. pylori Urease test, 45T; Tablet



Professional Test kit

## INFECTIOUS DISEASES - ELISA KITS

- Chlamydia pneumoniae IgG, IgM, IgA, EIA
- Mycoplasma pneumoniae IgG, IgA, IgM, EIA
- Bordetella pertussis, IgG, IgA, IgM, EIA
- Bordetella pertussis PT IgG, EIA
- Chlamydia trachomatis IgG, IgA, EIA
- Toxoplasma gondii IgG, IgM, EIA
- Toxoplasma gondii IgG Avidity



**MOLECULAR BIOLOGY REAGENTS**

- Simultaneous and separate detection of two bacteria in a single tube reaction from respiratory samples
- Specificity 100%, no cross reactivity
- Ready to use reagents and controls with short assay run time
- 10 copies detection limit



C.pneumoniae + M.pneumoniae duplex RT PCR  
 B.pertussis + B.parapertussis duplex RT PCR

**VMA-HVA-5-HIAA - LC/MS-MS**

- LC-MS/MS kit for accurate quantitation of Vanillylmandelic acid (VMA), Homovanillic acid (HVA), and 5-Hydroxyindoleacetic acid (5-HIAA) in human urine sample
- Excellent reproducibility and high sensitivity



**VIT AE - HPLC**

- Simultaneous and quantitative determination of Vitamin A and Vitamin E in Human Serum/Plasma samples
- Less injection volume with low flow rate



**VIT D - HPLC**

- Intended for the quantitative determination of 25-hydroxyvitamin D3 and 25-hydroxyvitamin D2 in human serum and plasma sample
- Comparatively lesser flow rate



**AROMATIC AMINO ACIDS - HPLC**

- Allows the quantitative analysis of Phenylalanine, Tyrosine, and Tryptophan in human plasma sample
- Helps monitoring of dietary therapy of Phenylketonuria



**HPLC & LC-MS/MS**

**HPLC & LC-MS/MS KITS**

\*coming soon

**IS MASS**

- LC-MS/MS based kit to detect immunosuppressant drugs in human whole blood
- Allows the monitoring of below Immunosuppressant drugs in organ transplants Cyclosporine A (Cyc A), Tacrolimus (TAC), Sirolimus (SIR), Everolimus (EVE)



**VIT - D - MASS**

- Quantitative determination of D2 and D3 in human serum using LC-MS/MS
- Provides accurate quantification method to Monitor Vitamin D level (D2 & D3)
- Fast analysis time per sample (5 minutes).



# NOTES

A large gray rectangular area containing 18 horizontal dashed lines, serving as a template for notes.





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