INVEST IN FUTURE

COMPREHENSIVE NEWBORN SCREENING SOLUTIONS AND PRODUCTS FROM THE PIONEER
Labsystems Diagnostics - Leadership is about being first in setting trends

Evolution

Labsystems Diagnostics Oy has been a forerunner in innovative diagnostic research and development for the last 30 years. The company develops, manufactures and markets high quality enzyme immunoassays, molecular assays and Point of Care tests. Labsystems Diagnostics has been a pioneer in the field of In Vitro diagnostics bringing unique and relevant products and assays addressing a wide array of medical conditions.

Breakthroughs in Newborn Screening (NBS)

- The first company in the world to introduce fluorometric microplate based assay for phenylalanine for diagnosing phenylketonuria (PKU) in newborns
- Pioneered Newborn Screening products and systems based on fluorescence and photometric detection
- The first and only company in the world to have an assay for the diagnosis of neonatal Toxoplasmosis
- Fully integrated robotic platforms NS2400 and NS1200 with the most comprehensive menu of NBS assays helping screen millions of babies for inborn errors of metabolism and congenital problems
- Neonatal PKU, hTSH, 17-OH-Progesterone, IRT, G6PD, Galactose, Biotinidase, Toxoplasma gondii IgM kits
- NS Puncher, NS Incubator/ Shaker, NS Disc Remover, NS Washer, NS Reader, NS200 Multimode reader

Newborn Screening

Newborn Screening or Neonatal Screening is a preventive pediatric screening service performed to diagnose congenital or inborn errors of metabolism in order to identify patients and administrate treatment starting from the first weeks of life to reverse the prognosis. Early diagnosis and treatment correlates with significant reduction in mortality and associated disabilities for those affected.
Complete
Newborn Screening System
with automated fluorescence platform

FLEXIBILITY OF USE
All reagent kits can be used manually in modular systems
or in fully automated and hands off systems. All our reagents are CE marked.

REVOLUTIONARY NS2400
NEONATAL SCREENING AUTOMATE

<table>
<thead>
<tr>
<th>Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fully integrated robotic high throughput system</td>
</tr>
<tr>
<td>24 plates per run (NS2400)</td>
</tr>
<tr>
<td>Performs all assays (TSH, PKU, 17OHP, G6PD, Galactose, IRT, Biotinidase &amp; Toxo IgM)</td>
</tr>
<tr>
<td>Reduced running costs (no disposable tips)</td>
</tr>
<tr>
<td>Integrated disc remover</td>
</tr>
<tr>
<td>High sensitive fluorometric detection</td>
</tr>
<tr>
<td>Patient management software</td>
</tr>
</tbody>
</table>
NEWBORN SCREENING MODULAR DEVICES

Reliable Newborn Screening devices provided by Labsystems Diagnostics

<table>
<thead>
<tr>
<th>Automatic NS496 DBS Puncher</th>
</tr>
</thead>
<tbody>
<tr>
<td>NS Incubator/ Shaker</td>
</tr>
<tr>
<td>Stand-alone NS96 Disc Remover</td>
</tr>
<tr>
<td>NS200 Multimode reader</td>
</tr>
<tr>
<td>NS Washer</td>
</tr>
<tr>
<td>NS Reader</td>
</tr>
<tr>
<td>Sample Cards</td>
</tr>
</tbody>
</table>

The use of reliable and fast equipment in the screening process is important to ensure the care that the little patients and their families deserve.

AUTOMATIC NEONATAL DBS PUNCHER NS496

Accurate disc punching of dried blood spot samples

Labsystems Diagnostics’ new NS496 DBS puncher is designed for automated punching of 3.2mm (1/8inch) discs from dried blood spot samples. Up to 4 plates can be handled at the same time. There is flexibility for one parameter of 4 plates, or 2 parameters of 2 plates each, or 3-4 parameters of 1 plate each. Maximum capacity is 2300 samples per hour.

- Operates 4 plates at a time
- Optical sensor checking sample quality
- Unique disc sensor ensures discs are falling into the plate
- 10 inch touch screen and multiple operation mode

NS96 DISC REMOVER

Stand-alone NS96 Disc Remover effectively removes the sample discs after incubation and reduces the change of cross contamination.
**NEONATAL PHENYLALANINE**

Quantitative fluorometric screening kit for PKU

A chemical method intended for the quantitative determination of phenylalanine from dried blood spots.

- Simple and easy to perform
- Excellent analytical sensitivity
- Extensive experiences from worldwide customers
- Calibrated against the latest international references

**NEONATAL hTSH FEIA**

Fluorometric enzyme immunoassay for the quantitative determination of human thyrotropin from dried blood spots.

- Minimal background
- Good stability
- Calibrated against the latest international references
- Good agreement with CDC samples

**NEONATAL 17-OH-PROGESTERONE FEIA**

Easy and reliable screening for CAH from dried blood spots

Fluorometric enzyme immunoassay for the quantitative determination of human 17-OH-progesterone from dried blood spots.

- Competitive assay
- Excellent reproducibility
- High sensitivity with high signal/background ratio
- Calibrated against the latest international references

**NEONATAL IRT FEIA**

Fluorometric enzyme immunoassay for the quantitative determination of human Immunoreactive Trypsinogen (IRT) from dried blood spots as a primary test for screening babies for cystic fibrosis (CF).

- High sensitivity
- Easy to perform, similar procedure as other kits (TSH, 17OH)
- Stable reagents
NEONATAL GLUCOSE-6-PHOSPHATE DEHYDROGENASE (NEONATAL G6PD)

Easy measurement of G6PD deficiency
Enzymatic method for the quantitative determination of glucose-6-phosphate dehydrogenase activity from dried blood spots, with fluorometric detection.

Excellent reproducibility
Superior agreement with external quality samples
Simple and easy to perform
Good stability

NEONATAL GALACTOSE

Combined determination of free galactose and galactose-1-phosphate
Enzymatic method for the quantitative determination of total galactose from dried blood spots, with fluorometric detection.

Excellent reproducibility
Good agreement with CDC samples
Excellent analytical sensitivity

NEONATAL BIOTINIDASE

Enzymatic method for the quantitative determination of biotinidase enzyme activity in dried blood spots, with fluorometric detection, intended for screening newborn for biotinidase deficiency.

Easy to perform
No centrifuge or filtration step needed

NEONATAL TOXOPLASMA GONDII IgM FEIA

Easy and reliable screening for Congenital Toxoplasmosis
Fluorometric enzyme immunoassay for the determination of IgM antibodies to Toxoplasma gondii from dried blood spots.

First Neonatal Toxoplasma screening test in the world
Quantitative results
Clinically proven performance
High sensitive µ-capture test
## Newborn Screening Reagents

<table>
<thead>
<tr>
<th>Cat. no.</th>
<th>Product name</th>
<th>Plate type</th>
<th>Pack size</th>
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</thead>
<tbody>
<tr>
<td>6199850</td>
<td>Neonatal Galactose, fluorometric test</td>
<td>96-well solid</td>
<td>960 wells</td>
</tr>
<tr>
<td>6199851</td>
<td>Neonatal Galactose, fluorometric test</td>
<td>96-well solid</td>
<td>480 wells</td>
</tr>
<tr>
<td>6199860</td>
<td>Neonatal G6PD, fluorometric test</td>
<td>96-well solid</td>
<td>960 wells</td>
</tr>
<tr>
<td>6199861</td>
<td>Neonatal G6PD, fluorometric test</td>
<td>96-well solid</td>
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<tr>
<td>6199870</td>
<td>Neonatal 17-OH-Progesterone FEIA</td>
<td>12x8 strip</td>
<td>480 wells</td>
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<tr>
<td>6199871</td>
<td>Neonatal 17-OH-Progesterone FEIA</td>
<td>96-well solid</td>
<td>960 wells</td>
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<tr>
<td>6199872</td>
<td>Neonatal 17-OH-Progesterone FEIA</td>
<td>12x8 strip</td>
<td>960 wells</td>
</tr>
<tr>
<td>6199876</td>
<td>Neonatal Phenylalanine (PKU), fluorometric test</td>
<td>96-well solid</td>
<td>960 wells</td>
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<tr>
<td>6199880</td>
<td>Neonatal hTSH FEIA Plus</td>
<td>96-well solid</td>
<td>960 wells</td>
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<tr>
<td>6199882</td>
<td>Neonatal hTSH FEIA Plus</td>
<td>12x8 strip</td>
<td>480 wells</td>
</tr>
<tr>
<td>6199883</td>
<td>Neonatal hTSH FEIA Plus</td>
<td>12x8 strip</td>
<td>960 wells</td>
</tr>
<tr>
<td>6199802</td>
<td>Neonatal T. gondii IgM FEIA</td>
<td>12x8 strip</td>
<td>480 wells</td>
</tr>
<tr>
<td>6199820</td>
<td>Neonatal Biotinidase</td>
<td>96-well solid</td>
<td>480 wells</td>
</tr>
<tr>
<td>6199821</td>
<td>Neonatal Biotinidase</td>
<td>96-well solid</td>
<td>960 wells</td>
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<tr>
<td>6199831</td>
<td>Neonatal IRT FEIA</td>
<td>96-well solid</td>
<td>960 wells</td>
</tr>
<tr>
<td>6199832</td>
<td>Neonatal IRT FEIA</td>
<td>12x8 strip</td>
<td>960 wells</td>
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</table>

## Newborn Screening Instruments

<table>
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<tr>
<th>Cat. no.</th>
<th>Product name</th>
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<tr>
<td>5400200</td>
<td>Neonatal Screening Automate</td>
</tr>
<tr>
<td>5450100</td>
<td>Neonatal DBS Puncher</td>
</tr>
<tr>
<td>5550400</td>
<td>Neonatal Disc Remover NS96 (110 V)</td>
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<tr>
<td>5550300</td>
<td>Neonatal Disc Remover NS96 (220 V)</td>
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<tr>
<td>5420211</td>
<td>NS Microplate Washer</td>
</tr>
<tr>
<td>5112251</td>
<td>NS Microplate Incubator Shaker</td>
</tr>
<tr>
<td>5410211</td>
<td>NS Microplate Fluorometric Reader</td>
</tr>
<tr>
<td>5410300</td>
<td>NS 200 Multimode Reader</td>
</tr>
</tbody>
</table>

For more information, please contact sales@labsystemsdx.com, logistics@labsystemsdx.com