CSF TESTING IN LESS THAN 2 HOURS

A novel Easy-Plex™ 96 system can be created by combining the Easy-Plex™ Processor with the Roche LC480 allowing multiple target detection in single samples in a record breaking time.

HIGH TURNAROUND MULTIPLEXED TESTING WITH EASY-PLEX™ 96

The Easy-plex™ 96 System was designed to meet low throughput but urgent testing needs. Here we demonstrate the option of performing single sample testing.

System components.
We have combined the Easy-Plex™ processor and the 96-well Roche LC480 to create an Easy-plex™ 96 system. During evaluation we ran 1-3 samples using direct PCR assays (without extraction). In certain cases extraction may be needed. For these samples, we performed the magnetic bead extraction (in-house protocol).

Time required for the analysis.

<table>
<thead>
<tr>
<th>Component</th>
<th>1 sample</th>
<th>3 samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1 time</td>
<td>57 min</td>
<td>61 min</td>
</tr>
<tr>
<td>Real-time PCR</td>
<td>54 min</td>
<td>54 min</td>
</tr>
<tr>
<td>TOTAL</td>
<td>111 min</td>
<td>115 min</td>
</tr>
<tr>
<td>Total time if extraction needed</td>
<td>121 min*</td>
<td>130 min*</td>
</tr>
</tbody>
</table>

* based on time measurement of in-house magnetic bead extraction of 1 or 3 samples

RECENTLY LAUNCHED & COMING SOON PANELS

Updated Legionella target
We have designed new assays for Legionella longbeachae and L.pneumophila based on predicted issues with specificity and inclusivity for each assay. Several samples were run in the panels with the new assays and sequencing results were obtained confirming the new panels are giving correct results. The following panels have been updated: ‘Respiratory pathogen B 16-well’ (20612), ‘Pneumonia 16-well’ (20631)

Updated Norovirus 1 and Salmonella assays
We have a new assay for Noro 1 which shows much cleaner results than the current one. Validation testing of samples, which were confirmed by a reference method, shows it works well and is specific. Clinical validation is at a final stage now. Furthermore, based on the melt variation seen in the existing Salmonella assay, a redesign was performed on the same target, and it was shown that this modification looks promising. Clinical validation is ongoing.

EVENTS SUMMARY

10th Anniversary User Group Meeting in the UK
Wednesday, May 25, 2016 10.00-19.00
Kegworth Hotel and Conference Centre, Packington Hill, Kegworth Derbyshire DE74 2DF.
This is a great opportunity to find out about new product developments at AusDiagnostics, to meet with other users, and feed back changes and improvements you would like us to implement. Please contact Richard Hale for details (richard.hale@ausdx.com)

The Australian Society for Microbiology Meeting ASM2016
3rd – 6th July 2016 Perth Convention and Exhibition Centre, 21 Mounts Bay Rd, Perth, WA
Meet us in Perth at our booth!

10th Anniversary User Group Meeting in Melbourne, Australia
Thursday, September 8th, 2016 Crowne Plaza. Details to be announced soon!
NEW DEVELOPMENTS

New panels for HPV detection and genotyping
Our new set of HPV panels will differ from previous ones in their ability of precise genotyping. A small 8-well panels will detect and discriminate 14 HPVs (only high-risk), that is types 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 66 and 68. The broader panel, carried out in a 16-well format will add low-risk and probably high-risk types to the list above, eventually including genotypes: 6, 11, 16, 18, 31, 33, 35, 39, 42, 43, 44, 45, 51, 52, 53, 56, 58, 59, 66, 68, 70 & 82

Arboviral panel
A new panel, covering arboviral infections is under development now. This diagnostic kit will include the most common viruses, that cause tropical fevers and diseases, featuring the recently discovered Zika virus. The list of targets in the first version of this panel will contain Dengue Viruses types 1 to 4, Chikungunya Virus, Ross River Virus, Japanese Encephalitis Virus, Kunjin Virus, West Nile Virus & Zika Virus.

UTI resistance
We have developed 4 new assays to expand this panel to a 24-well drug resistance panel for Easy-Plex™ 96.

Parainfluenza
We have designed a new assay which should amplify both human parainfluenza 1 and parainfluenza 3, which is being tested at the moment. It should free up a slot for more pathogens in the Respiratory pathogen B & C panels.

NEW SOFTWARE FEATURES

Check your software. Current versions are 1.9.2 for Assay Setup and 1.6.1 for Easy-Plex™ Results. New versions feature quite a few new important and convenient functions.

Hiding and showing curves.
Right mouse click on sample name reveals the menu

NEW DEFINITIONS IN PRODUCTS NAMES
Starting May 2016 we will harmonise terminology used for our products names, as well as unify names on labels, in IFUs, on the website and in marketing materials. Briefly:

- We will call the whole panel, a ‘Product’ consisting of step 1 tubes, step 2 rings/plates/strips and mastermix. We will no longer use term ‘kit’ for step 1 + step 2 set.
- Step 1, Step 2 and Mastermixes will now be called ‘Components of the product’
- Unified names of product components will now describe the kind of component (‘Step 1 tubes’, ‘Step 2 plates’, ‘Step 2 Rings’ etc) followed by the full name of the product including number of wells, e.g. ‘Step 2 Strips: CSF 16-well’

All these changes in naming are not connected to and do not lead to any changes in products composition, properties or analytical & clinical performance.

ASEP PROGRAM UPDATE

- Faecal Pathogens 2016 Results are currently being compiled. Thanks to all of you who have participated in the largest ASEP yet!
- ‘Respiratory Pathogens’ are around the corner. The focus will be on pathogens found in the lower respiratory tract. Keep an eye out - registration for participation will open soon.

COMPANY NEWS

Jennifer Morse has joined us as a Production Assistant in February
Stephen Glover started in March as Software and Mechatronics Engineer
Richard Kightley - Dispatch and laboratory Assistant, who joined us in May

Contact:
www.ausdiagnostics.com