AMPLITIMES

Idaho Technology Inc.

April 2007, Volume 2, No. 2

Welcome to Idaho Technology's Spring issue of *Amplitimes*! We are continuously improving on our products in answer to ever changing demands for better mutation and pathogen detection. In this issue, we are pleased to highlight a new feature of our LightScanner® System and a new food safety system using the R.A.P.I.D.® LT.

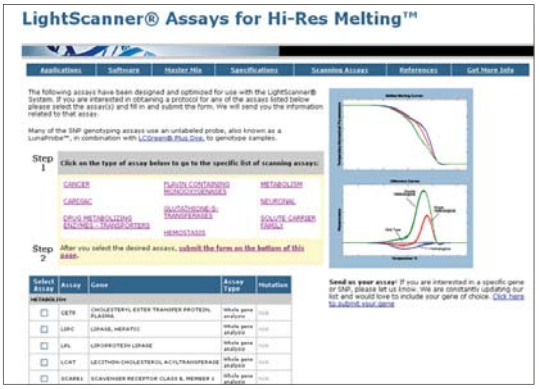
In addition, we are also starting a Frequently Asked Question series of articles. These articles will feature questions most commonly asked of our Technical Support representative along with the answers and solutions. We hope you will find this feature useful.

Accelerate Your Mutation Discovery and SNP Genotyping

In an effort to provide the highest level of support for our LightScanner customers, we are proud to announce the launch of LightScanner Assays online.

The following link will take you to a list of LightScanner assays that have been designed and optimized by Idaho Technology (ITI) for use with the LightScanner System:

http://www.idahotech.com/LightScanner/LSAssays.htm



Just click on the check box next to the desired assay, fill in the submission form, and submit. Currently, we offer the following optimized assays: Cancer, Cardiac, Drug Metabolizing Enzymes-Transporters, Flavin Containing Monooxygenases, Glutathione-S-Transferases, Hemostasis, Metabolism, Neuronal, and Solute Carrier Family.

The assay protocol includes the primer sequences, reaction conditions, and thermal cycling conditions. Many of the single nucleotide polymorphism (SNP) genotyping assays use an unlabeled probe, also known as a LunaProbe™, in combination with LCGreen® Plus Dye, to genotype samples. All protocols have been designed and optimized for use with the LightScanner Master Mix.

Because we are committed to our customers success with Hi-Res Melting™, this service is provided to LightScanner customers at no charge.

If you have other assays not listed here that you would like to see optimized for use on the LightScanner, send them to us using the submission form that can be accessed on the left hand side of the web page. We will be continually updating the information on this page.

Visit www.idahotech.com to see the complete assay list and request your protocol today.

Inside this Issue

Frequently Asked Questions—R.A.P.I.D. 7200 Software

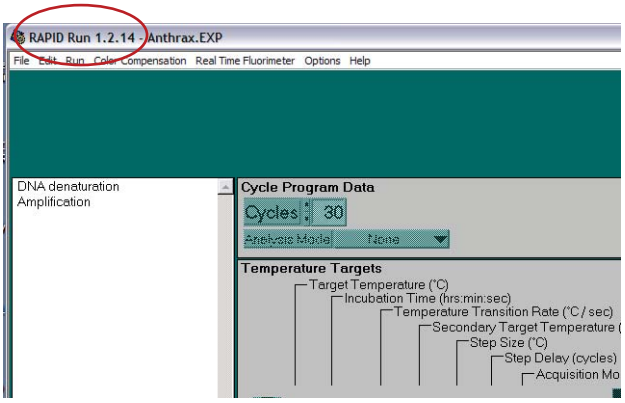
ITI Technical Support often receives similar questions about its products. This column features answers to questions frequently asked about the R.A.P.I.D. 7200 software. For further help or information, please contact Quinn Aubrey at (800) 735-6544 or at quinn@idahotech.com.

What is the latest version of RAPID 7200 software?

The latest version of RAPID 7200 software is 1.2.14. Version 1.2.14 replaced version 1.2.8. If you need to update your software, please contact Quinn Aubrey at the number above.

How do I know what version of software I have installed?

The software version is displayed in the top, left-hand corner of the Run window.



Is there a Windows® XP version of RAPID 7200 software?

No, there is only one version of R.A.P.I.D. 1.2.14 software. It is validated on Windows 2000 only. The software is written in LabView, and the vendor for the LabView programming environment has reported that there are some incompatibilities with Windows XP, so we don't recommend using it with anything but Windows 2000.

The advanced options button in my R.A.P.I.D. 7200 software is disabled. How do I enable advanced options?

See "[User Access]" in chapter 5 of the R.A.P.I.D. 7200 technical manual or complete the following steps:

1. Select **Control/Alt/Delete** or restart computer and log on as Administrator. [This is the local Windows 2000 logon, not a network logon.]
2. Go to the Start Menu and select **Settings/Control Panel**.
3. Once the control panel opens, open the Users and Passwords option.
4. If a RapidUsers Group is not in the Administrator User Name, then continue to step 5. If a R.A.P.I.D. Users Group already exists, then skip to step 21 below.
5. Left click on the **Advanced** tab at the top of the Users and Passwords dialog box.
6. Choose the **Advanced Button**. It is down in the middle of the dialog box under the Advanced tab.
7. In the left pane of the Advanced dialog box, double click the left mouse button on the yellow **Groups** folder to open it.
8. When the Groups folder is open, there will be a New Group... item under the drop-down Action Menu from the top of the dialog box. Choose **New Group**.
9. Select the **Create** button in the New Group dialog box.
10. Enter **RapidUsers** with no spaces and no quotes as the name of the new group.
11. After choosing the Close button, the R.A.P.I.D. Users group should be in the right pane of the Advanced dialog box when the Groups folder on the left is open.
12. Double click the left mouse button on the **R.A.P.I.D. Users** group in this right pane to open its properties dialog box.
13. Choose the **Add** button.
14. Scroll down the list to RAPIDINSTALL\Administrator.
15. Double click the left mouse button on **Administrator** to add this group to the lower pane in this dialog box.
16. Select the **OK** button.
17. Select the **Apply** button. (This is required and very important.)
18. Select the **Close** button.
19. Reboot the computer. (This is required and very important.)
20. Now a RapidUsers Group is in the Administrator User Name, as in page 32 in the manual.
21. To add a new user, select **Add**.
22. Enter **User name**, **Full name**, and **Description fields**. Select **Next**.
23. Enter **Password** and **Confirm fields**. Select **Next**.
24. Select **Other** option. To give access to Advanced Options software, select **RapidUsers** from the pull-down menu. To deny access to Advanced Options software, but grant access to R.A.P.I.D. runs, select **CommonUsers/Guests**. Select **Finish**.

Pathogen Identification in Foods

With the recent scares in the chocolate, pet food, chicken, and vegetable food industries, it has become more important than ever to have fast and reliable pathogen identification methods to monitor manufacturing environments. In answer to this critical need, ITI has developed the R.A.P.I.D. LT Food Safety System (FSS).

This system a polymerase chain reaction (PCR)-based system used to detect food pathogens. The system is based on an optimized pre-enrichment protocol, freeze-dried PCR reagents, the R.A.P.I.D. LT real-time PCR instrument, and customized R.A.P.I.D. LT automatic detection software. The R.A.P.I.D. LT FSS offers shortened enrichment protocols for common food pathogens due to the sensitivity of PCR. Freeze-dried, room-temperature stable assays are simple to use and available for multiple food pathogens including *Listeria, Salmonella, E. coli,* and *Campylobacter*. These assays contain all necessary PCR reagents in one tube, so the user only needs to add prepared sample. The instrument combines rapid air thermocycling, a real-time fluorimeter, and easy-to-use software that automatically collects, analyzes, and interprets data to reliably identify test samples.

The R.A.P.I.D. LT FSS is much faster than traditional testing methods for food pathogen detection and is the fastest molecular-based detector on the market. The sensitivity of PCR, combined with the speed of air thermocycling, results in shorter PCR protocols. These shorter protocols reduce the amount of time spent waiting for results on finished food products, and, at the same time, ensure the highest levels of accuracy and quality. Because of its sensitivity, accuracy, and high speed, the R.A.P.I.D. LT FSS is ideal for rapid pathogen identification in the food industry.

If you would like more information about the R.A.P.I.D. LT FSS, please contact Haleigh Millward at haleigh@idahotech.com or at (800) 735-6544.

Photo of the Quarter

Tulip Forest
Salt Lake City
(Jamey Hulsberg, Research Associate)

Dates to Remember

May

9–10 Ready!—The Emergency Preparedness and Response Conference and Exposition (GOVSEC)
Washington, D.C.
www.homelandsecurityevent.com/ready.html

21–24 HGM2007— HUGO's 12th Human Genome Meeting
Montreal, Canada
http://hgm2007.hugo-international.org

21–25 American Society for Microbiology
Toronto, Canada
http://gm.asm.org

22–25 9th Intl. Symposium on Protection against Chemical and Biological Warfare Agents
Gothenburg, Sweden
http://www.cbwsymp.foi.se

31–3 Jun Intl. Hazardous Materials Response (HAZMAT) Teams Conference
Hunt Valley, Maryland
http://www.iafc.org/displaycommon.cfm?an=1&subarticlenbr=83

June

16–18 European Society of Human Genetics (ESHG)
Nice, France
http://www.eshg.org/eshg2007/index1.htm

July

8–11 International Association for Food Protection (IAFP)
Lake Buena Vista, Florida
http://www.foodprotection.org/meetingsEducation/2007ammain.asp

Editor's Note: If you have comments or suggestions for articles, please e-mail the editor at loretta_orgill@idahotech.com.

Department of State Note: The R.A.P.I.D. System and RAZOR Instrument are controlled for export under the International Traffic in Arms Regulations (ITAR), administered by the U.S. Department of State, Directorate of Defense Trade Controls (DDTC) and may not be exported or transferred to any foreign national without prior approval of the DDTC.

R.A.P.I.D.® and RAZOR® Systems Training

ITI offers training courses for the R.A.PI.D. and RAZOR systems. Training for two people is included with the purchase of the R.A.P.I.D. or RAZOR instruments, and more can attend for an additional cost. The training courses are three days for the R.A.P.I.D. and one day for the RAZOR. Courses focus on concepts of operation, sample preparation, reagent setup, and software. If you would like to attend or schedule a training course, please contact our training staff at 1-800-735-6544 x. 439.

LightScanner Webinars on the Internet

The following webinars can be accessed via www.idahotech.com/LightScanner/webinars-LS.htm:

- *Somatic Mutation Detection in Primary Tumor Samples*
- *LightScanner Primer Design Software Training*
- *Screening Genetic Variants Associated with Dyslipidemia using the LightScanner System*
- *High Throughput Genotyping Using Unlabeled Oligonucleotide Detection Probes*
- *The LightScanner System: Achieve High Throughput Mutation Discovery and Gene Scanning*

If you have any questions about the topics of these webinars or would like more information, please contact Rachel Jones at rachel_jones@idahotech.com or (801) 736-6354 x. 438.