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QuantStudio 6 Pro和7 Pro 智能实时荧光定量PCR系统



Applied Biosystems的技术让您的 real-time PCR实验更 快、更简单和结果更可信

Applied BiosystemsQuantStudio 6和7 Pro实时荧光定量 PCR系统能够检测单链反应中目标量差异小至1.5倍并获得 10个对数单位的线性动态范围(Figure 1)。

具有3或6个独立的温度区, QuantStudio Pro仪器的VeriFlex 模块为同时运行多个实验提供了灵活性。

快速热循环功能模式可在不到30分钟的时间内获得结果。



Figure 1. Real-time PCR reproducibility. This plot shows results from amplification of KAZ plasmid DNA in 10-fold dilutions (A to J: starting with $A = 10^{9}$ to $J = 10^{9}$, no template control (NTC)) using the 384-well block

and Applied Biosystems[™] TaqMan[®] Fast Advanced Master Mix. The data

show highly reproducible results over 10 logarithmic units of input template

Amplification plot

不同仪器平台间测试结果的可比性

无论是采用QuantStudio 6 and 7 Pro、QuantStudio 6 and 7 Flex和7900HT Real-Time PCR系统,都可以获得一致的实验 结果(Figure 2)。

使用QuantStudio 6和7 Pro系统随机软件进行的基础性分析 与其他QuantStudio仪器上的分析结果类似 (Figure 3)。



Figure 2. Comparison of $\Delta\Delta C_t$ data between QuantStudio 7 Pro, QuantStudio 7 Flex, and 7900HT systems demonstrates equivalent relative expression level of *GFAP*, *ALB*, and *KRT1* in cDNA of universal human reference RNA, total liver RNA (LIV), and total brain (BRN) RNA.

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Figure 3. Primary analysis of a completed run. The amplification curves, assay maps, and results including quality control (QC) alerts are displayed after a run is complete. The curves can be adjusted as needed, similar to other QuantStudio instruments.

拥有qPCR pro后一天的工作模式

amount, illustrating the broad linear dynamic range of the system.

At your desk

您只需坐在办公桌前即可轻松完成一下操作:

- 计划好您的实验,设计实验运行协议
 并直接发送到您所选的仪器
- 与现场或远程的内部人员进行实验的 协作
- 无需亲临仪器现场的专用电脑下载 数据,在办公桌前即可进行检索和分 析测试结果。
- 检查仪器是否处于可用状态,并预 约好运行时间以实现最佳工作效率



2

机身够小巧,可换模块多

实验空间节省但应用灵活性增加

无论现在拥有一台还是两台仪器,使用QuantStudio 6 和 7 Pro系统都可以节省实验室工作台空间。

Trade in larger and older instruments ...



... and save lab bench space



54.7 x 33.8 x 52.5 cm (H x W x D), and the screen is in full color.

更换样品反应模块轻松简便

实用屏幕流程向导快速简便地完成反应模块的快 速简便更换

- 1. 查看当前安装的反应模块信息。
- 2.点击 "更换Change" 按钮。



- 3. 系统松开反应模块和热盖。
- 4. 手工将模块和和热盖转移。
- 5. 装入新反应模块和热盖。
- 6. 点击"安装"按钮。





At the bench

1借助于简单、省时和少出错的系统功能,提升一天工作体验

- 借助于面部认证技术,无需脱下手 套操作,即可启动机器。
- 可用语音命令完成常规操作指令, 如"开始运行"和"打开门"。
- 使用带有射频识别(RFID)标签的 TaqMan阵列板,可减少数据输入并 简化您工作流程
- 照着屏幕上提示的流程,用语音命 令即可实现反应模块更换。如先说
 "Alexa, open Pro instrument,"然后发指 示"Change block"
- 将高质量qPCR数据无缝传送到所希 望的目的地





一个简单步骤即可快捷获得数据

TaqMan阵列板与RFID和QuantStudio 6和7 Pro系统创造了一个具有智能功能的 改进用户体验,消除了目前上传板布局和分析信息到实验文件所需的手动步 骤。只需插入板,QuantStudioPro系统可以捕捉板的布局设置信息。



Find out more at thermofisher.com/taqman-rfid



Description	No. of assays	No. of samples	Cat. No. (96-well 0.1 mL)	Cat. No. (96-well 0.2 mL)	
TaqMan Array Plates with RFID	N/A	N/A	A43823		
TaqMan Array, Standard, 96-well plate; Format 8	8	12	4413263	4413266	
TaqMan Array, Standard, 96-well plate; Format 16/16 Plus	16	6	4413261/4413262	4413264/4413265	
TaqMan Array, Standard, 96-well plate; Format 32/32 Plus	32	3	4413259/4413260	4391528/4391529	
TaqMan Array, Standard, 96-well plate; Format 48/48 Plus	48	2	4413257/4413258	4391526/4391527	
TaqMan Array, Standard, 96-well plate; Format 96/96 Plus	96	1	4413255/4413256	4391524/4391525	

A day in the life of a qPCR pro ...

Remote location

通过云连接平台,随时随地访问、分析和共享数据,以实现实时信息访问、安全的数据存储和在线结果共享

- Remote monitoring that shows run status and amplification plots in real time
- Data sharing and analysis features, using the cloud-enabled Connect platform
- Planning and scheduling your next experiment without delay for maximum productivity
- Be the ultimate qPCR pro in your lab or anywhere





	QuantStudio 6 Pro Real-Time PCR System	QuantStudio 7 Pro Real-Time PCR System				
样品容量 (wells)	96 or 384					
反应体积*	96-well 0.1 mL block: 10–30 μL 96-well 0.2 mL block: 10–100 μL 384-well block: 5–20 μL	96-well 0.1 mL block: 10–30 μL 96-well 0.2 mL block: 10–100 μL 384-well block: 5–20 μL TaqMan Array Card: ~1.5 μL				
激发光源	Bright white	e LED				
滤光片或颜色组合数	5	21				
激发光波长/发射光波长	450–680 nm/50	450–680 nm/500–730 nm				
多重荧光定量靶标种数(Multiplex qPCR)	5 or 6 tar	gets				
反应模块最快变温速率	96-well 0.1 mL block: 9.0°C/sec 96-well 0.2 mL block: 6.5°C/sec 384-well block: 6.0°C/sec	96-well 0.1 mL block: 9.0°C/sec 96-well 0.2 mL block: 6.5°C/sec 384-well block: 6.0°C/sec TaqMan Array Card: 3.0°C/sec				
样品平均变温速率	3.66°C/s	Sec				
模块温度均一性	0.4°C	0.4°C				
温控范围	4–99.99	9.9°C				
所支持的燃料类型		AM [™] , SYBR [™] Green, VIC [™] , JOE [™] , TET [™] , ABY [™] , NED [™] , TAMRA [™] , Cy [®] 3, JUN [™] , ROX [™] , Texas Red [™] , Mustang Purple [™] , Cy [®] 5, LIZ [™] , Cy [®] 5.5				
数据电子签名功能 (SAE)	No	Yes, with no additional fees				
自动机械臂整合功能	No	Yes				

* Blocks are being released at intervals; some may not be currently available.

For more information and full testimonials, go to thermofisher.com/quantstudiopro

应用软件

Applied Biosystems创新的数据分析应用程序,将多个数 据分析模块聚集并合理布局,呈现出令人惊叹的数据可视 化效果,便于强分析和观察(Fig. 4 and Fig. 5)。

可定制的QC设置可用于支持需要指定自己QC规则的用户 (e.g., 阴性对照无Ct值或软件自动应用和提醒用户)。 用户还可以过滤和突出显示特定数据点,所有相应的 视觉效果都将被精确定位,以便通过软件的联锁导航 进行交叉检查。







Figure 5. Relative quantification. These charts enable efficient data review in the Design and Analysis Software.

QuantStudio 6 Pro和7 Pro实时荧光定量PCR系统智能化特点提供卓越的可靠性和绝佳用户体验

人性化—automatically load your settings and plate setup; no passwords required to log in, thanks to facial authentication

高效率—facilitate hands-free operations with voice commands; maximize uptime with Smart Help feature to access technical support experts for more efficient troubleshooting and resolution; reduce downtime using Smart Remote Support collaboration tool to guide you through repairs remotely; eliminate manual steps to obtain plate layout, protocol, and assay information on the instrument with TaqMan Array Plates with RFID 简单易用—straightforward block changes with no tools required; streamlined workflow directly from the touchscreen

富有成效—built-in help videos for commonly used activities; increased ergonomics with larger touchscreen, improved screen angle and optional Bluetooth[™] keyboard; access data anytime and anywhere with cloud-enabled services from Connect

安全、审计、电子签名(SAE)模块(Security, audit,

e-signature (SAE) module)

美国FDA的"电子记录和电子签名规定"法案,即21 CFR Part 11,对使用电子文件代替纸质文件做了规定,明确了 确保电子记录可靠性所需的系统要求、控制权限和操作流 程。符合FDA 21 CFR Part 11法规可确保电子数据的真 实、准确、完整和可追溯。只有遵照此标准产生、保留的 测试数据才能作为通过监管检验或者日后追溯的有效数据 来源。

会对每个用户进行身份验证,并验证其执行受控活动权限

 审核所有仪器发生的影响数据的事件、设计与分析桌面 软件,以确保数据可追溯性

• 允许电子签名功能进行数据验证

高级服务和技术支持

基于服务专业知识,我们的计划可帮助实验室保持正常运 行。

从安装和实践培训到技术支持,我们的训练有素的专业人员随时准备在您需要时为您提供帮助。

Find out more at thermofisher.com/instrumentservices



Orbitor RS2 微孔板移动机械臂

Orbitor RS2 微孔板移动机械臂可用于同时为1-2套实时 荧光定量 PCR仪 (QuantStudio 12K Flex、QuantStudio 7 Pro 和 QuantStudio 7 Flex)完成自动样品加载任务, 实现全自动实时荧光定量 PCR检测流程。 适用于0.1mL、0.2mL 96孔板和/或384孔qPCR板。

配套塑料耗材

Applied Biosystems提供了96孔板、384孔板、联管、管 盖和密封产品、单管和封板膜等各种规格的塑料耗材,经 多年验证,可与Applied Biosystems仪器完美兼容,拥有 卓越的PCR或qPCR性能。

仪器安装服务 (Installation)

• Conducted on-site by a professionally trained field service engineer

上机操作培训(Training)

- SmartStart[™] Orientation includes hands-on application training and reagents
- Equivalence consulting helps you to transition from an existing instrument



上门现场服务(Field service)

 Superior support from experienced field service specialists and remote infrastructure

智能帮助(Smart Help)

- On-screen, self-guided technical help
- Push-button requests to technical support
- Easy sharing of log and run files

智能远程支持(Smart Remote Support) Immersive collaboration tool

for faster troubleshooting and resolution

- Augmented-reality technology with real-time video and audio collaboration
- Advanced remote desktop support tool

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订货信息

订货套装	套装货号	仪器加定制服务套装*
QuantStudio 6 Pro system configurations		
QuantStudio 6 Pro Real-Time PCR System, 96-well, 0.1 mL block	A43160	A47200
QuantStudio 6 Pro Real-Time PCR System, 96-well, 0.1 mL block, laptop	A43167	A47202
QuantStudio 6 Pro Real-Time PCR System, 96-well, 0.1 mL block, desktop	A43181	A47204
QuantStudio 6 Pro Real-Time PCR System, 96-well, 0.2 mL block	A43159	A44288
QuantStudio 6 Pro Real-Time PCR System, 96-well, 0.2 mL block, laptop	A43166	A44290
QuantStudio 6 Pro Real-Time PCR System, 96-well, 0.2 mL block, desktop	A43180	A44292
QuantStudio 6 Pro Real-Time PCR System, 384-well block	A43161	A45582
QuantStudio 6 Pro Real-Time PCR System, 384-well block, laptop	A43168	A45584
QuantStudio 6 Pro Real-Time PCR System, 384-well block, desktop	A43182	A45586
QuantStudio 7 Pro system configurations		
QuantStudio 7 Pro Real-Time PCR System, 96-well, 0.1 mL block	A43163	A47201
QuantStudio 7 Pro Real-Time PCR System, 96-well, 0.1 mL block, laptop	A43170	A47203
QuantStudio 7 Pro Real-Time PCR System, 96-well, 0.1 mL block, desktop	A43184	A47205
QuantStudio 7 Pro Real-Time PCR System, 96-well, 0.2 mL block	A43162	A44289
QuantStudio 7 Pro Real-Time PCR System, 96-well, 0.2 mL block, laptop	A43169	A44291
QuantStudio 7 Pro Real-Time PCR System, 96-well, 0.2 mL block, desktop	A43183	A44293
QuantStudio 7 Pro Real-Time PCR System, 384-well block	A43164	A45583
QuantStudio 7 Pro Real-Time PCR System, 384-well block, laptop	A43171	A45585
QuantStudio 7 Pro Real-Time PCR System, 384-well block, desktop	A43185	A45587
QuantStudio 7 Pro Real-Time PCR System, TAC** block	A43165**	A47651
QuantStudio 7 Pro Real-Time PCR System, TAC** block, laptop	A43172**	A47653
QuantStudio 7 Pro Real-Time PCR System, TAC** block, desktop	A43186**	A47655
	A43180	A4/000

* Extended warranty packages include the instrument, SmartStart Orientation, and a 1-year AB Assurance Plan with 1 planned maintenance (PM) visit. Packages are not available in all countries. Contact your local sales representative for more information.

** Some block configurations may not yet be available. Go to thermofisher.com/quantstudiopro for a complete list and availability.

Ordering information

Product	Size	Cat. No.
Consumables		
Tack Ann Fact Advanced Master Mix	5 mL	4444557
TaqMan Fast Advanced Master Mix	50 mL	4444558
PowerTrack SYBR Green Master Mix	5 mL	A46109
POWERITACK SYDR Green Master Mix	50 mL	A46113
High Capacity RNA-to-cDNA Kit	50 reactions	4387406
Invitrogen SuperScript IV VILO Master Mix	500 reactions	11756500
Instrument Qualification (IQ), Operational Qualification (OQ), and Instrument P	erformance Verification (IPV)	services*
IQ/OQ/IPV service for QuantStudio 6 or 7 Pro systems, 96-well, 0.1 mL block		A45610
IQ/OQ/IPV service for QuantStudio 6 or 7 Pro systems, 96-well, 0.2 mL block		A44230
IQ/OQ/IPV service for QuantStudio 6 or 7 Pro systems, 384-well block		A45576
IQ/OQ/IPV service for QuantStudio 7 Pro systems, TAC block		A47663

* OQ/IPV service is not available in all countries. Contact your local sales representative for availability information.

Experience faster, easier qPCR in a compact design. See the future of qPCR at **thermofisher.com/quantstudiopro**



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