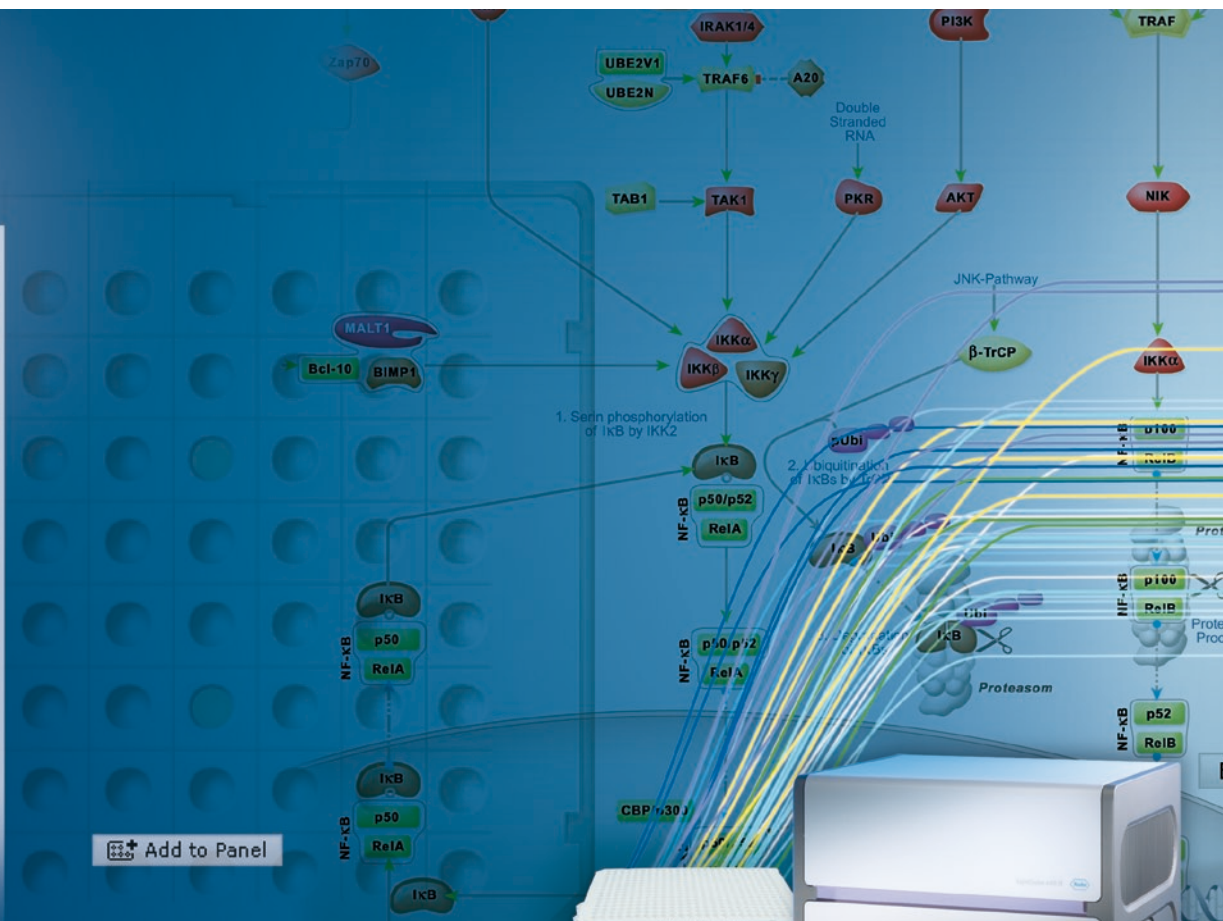


RealTime ready

Freedom of Expression

*Custom qPCR Assays and Panels -
Simple Online Configuration and Ordering*

Assay ID	Gene Symbol
100033	AATF
100035	ABL1
100017	ALFM2
100019	ALFM3
100048	ATF5
100049	AVEN
100052	AZU1
100062	BAG3
100068	BAK1
100079	BCL10
100083	BCL2
100085	BCL2A1
100092	BCL2A1
100104	BCL2A1
100108	BCL2A1
100111	BCL2A1
100113	BCL2A1
100115	BECN1
100120	BFAR
100122	BID
100126	BIK
100131	BIRC2
100135	BIRC3
100139	BIRC5

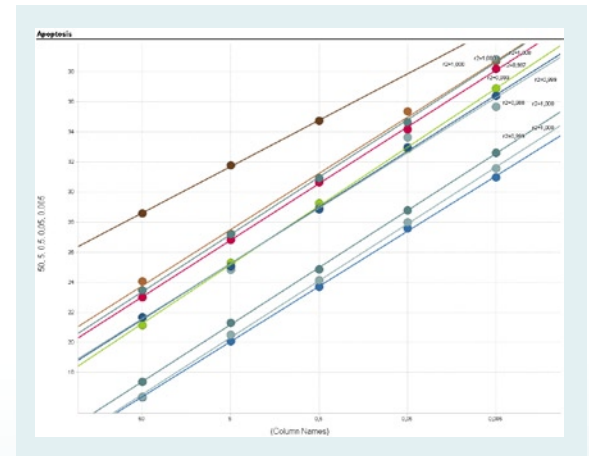


RealTime ready qPCR Assays

RealTime ready qPCR assays each contain target-specific primers and a Universal ProbeLibrary probe. Each assay is qualified after the design process to function in qPCR on the LightCycler® 480 Instrument using a universal biological sample with the LightCycler® 480 Probes Master. RealTime ready Assays, like all UPL assays, can be used successfully on any real-time PCR Instrument. Obtain exceptional performance using high-quality reagents like the RealTime ready DNA Probes Master. Each assay must comply with the following stringent criteria:

- **Linear dynamic range of at least 3 logs**
- **PCR efficiency of 2.0**
- **R² value of standard curve between 0.99 and 1.00**
- **High amplification specificity, no side products in gel analysis**

Linearity of amplification over five 10-fold dilution steps with efficiency values of 99,2 to 100 %.



Linearity plot (Cp vs log concentration) over five 10-fold dilution steps for 12 assays from the Human Apoptosis Pathway

RealTime ready Custom Panels for the LightCycler® 480 System

Custom panels on LightCycler® 480 Multiwell Plates 96 or 384 are composed of RealTime ready Assays of your choice. A multitude of different layouts (Fig. 2,3) is available for configuration. Assays are pre-plated and dried-down for a reaction volume of 20 µl on 96-well plates and 10 µl on 384-well plates; simply add sample cDNA and RealTime ready DNA Probes Master for fast and reliable results. On each panel, up to three wells are reserved for reference gene assays of your choice. In addition, most panel layouts feature a pre-plated error detection concept with RT+ and RT – controls.

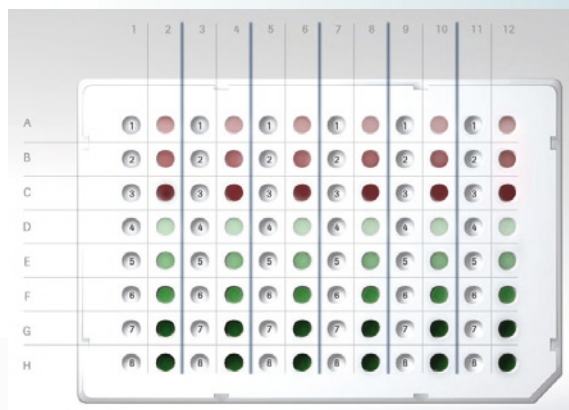


Figure 1: RealTime ready Custom Panel 96-16+



Figure 2: RealTime ready Custom Panel 384-64+

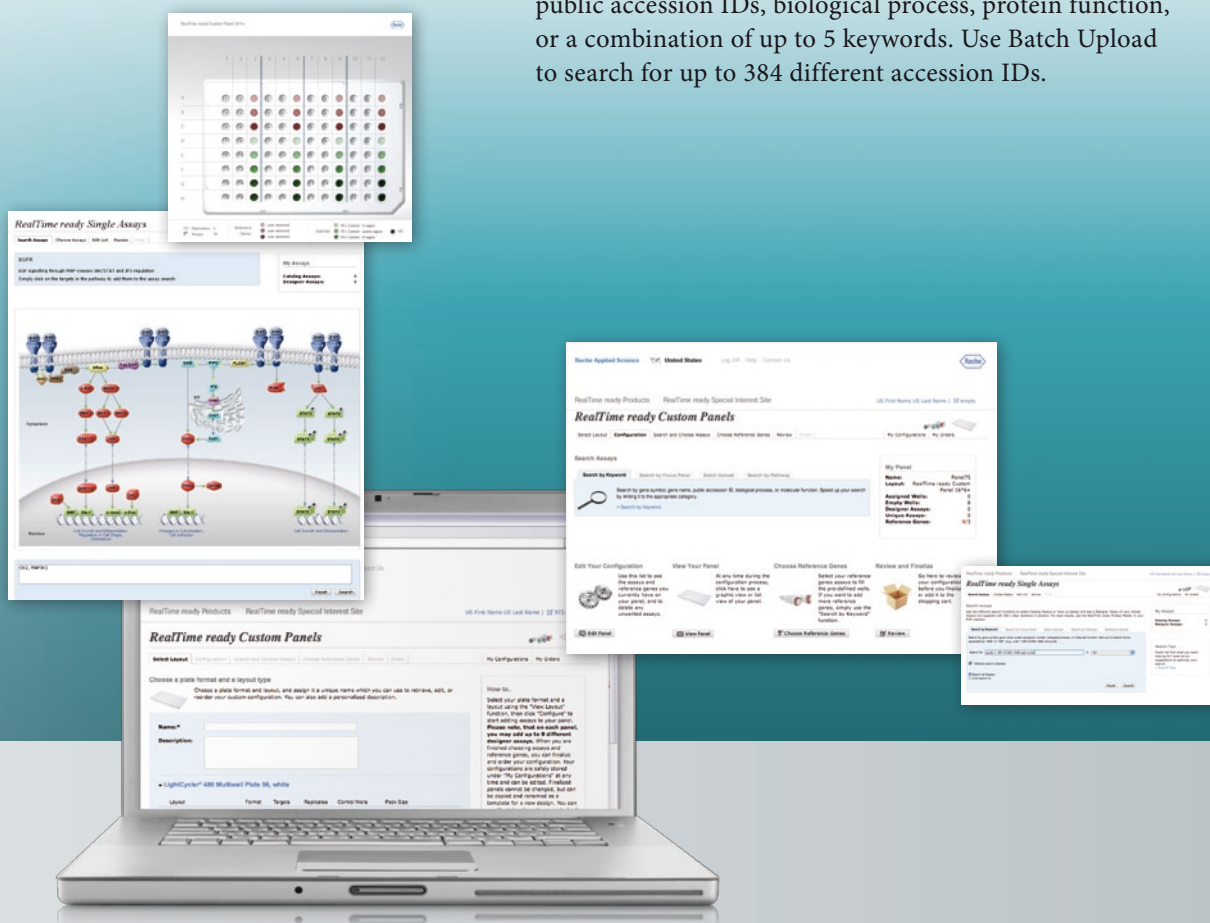
RealTime ready Configurator

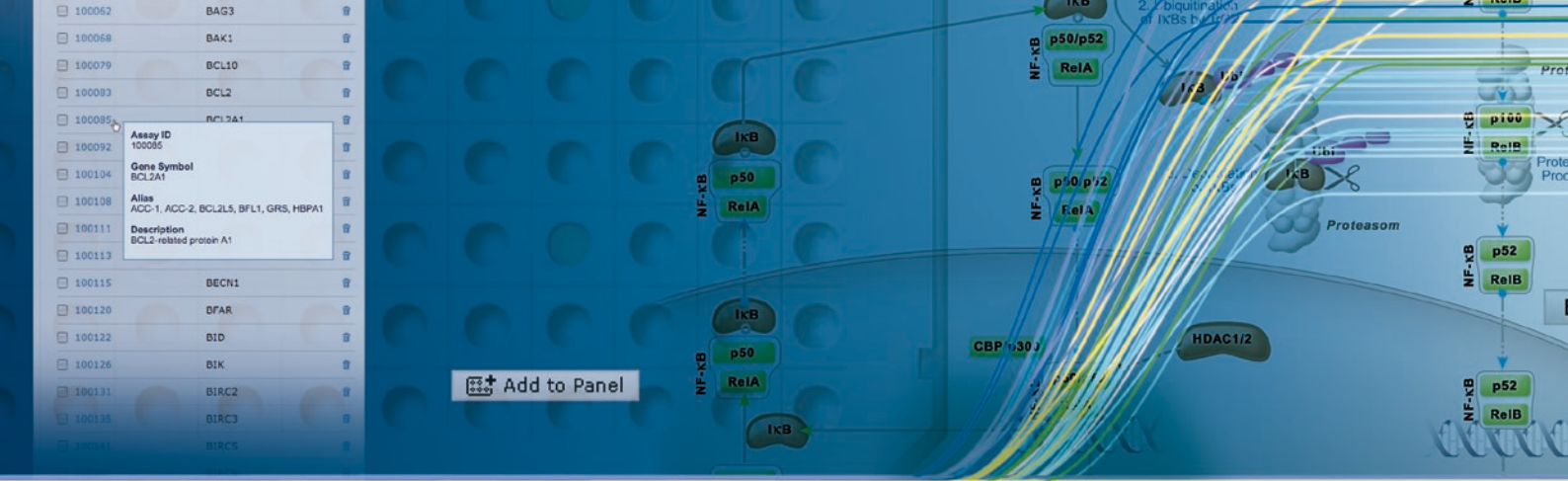
Online configuration and ordering

- Easily search assays and configure panels using comprehensive search functions matching your individual research needs and an intuitive interface.
- Benefit from assay details and bioinformatic background information that help you select relevant targets and choose the right assays.
- Use your password-protected account to automatically store configurations and edits at every step; panel content is available for download after production is completed.
- Order custom assays or panels via your choice of methods: online, e-mail, or fax.

Comprehensive Search Functions

- **Search by Pathway** to select assays for your targets from interactive maps of cellular or signaling pathways.
- **Search by Focus Panel** to select assays for your targets from pre-selected lists of large gene families or functionally related groups, such as GPCR, protein kinases, or functionally related groups such as transcription factors or ion channels.
- **Search by Keyword** to search by gene name, gene symbol, public accession IDs, biological process, protein function, or a combination of up to 5 keywords. Use Batch Upload to search for up to 384 different accession IDs.





Ordering Information

Product	Cat. No.	Pack Size
RealTime ready Custom Assays	Please go to www.realtimeready.roche.com	
RealTime ready Custom Panels	Please go to www.realtimeready.roche.com	
RealTime ready Focus Panels		
RealTime ready Human Reference Gene Panel, 96	05 339 545 001	2 plates (each containing 96 assays)
RealTime ready Human Reference Gene Panel, 384	05 467 675 001	2 plates (each containing 384 assays)
RealTime ready Human Apoptosis Panel, 96	05 392 063 001	2 plates (each containing 96 assays)
RealTime ready Human Apoptosis Panel, 384	05 339 316 001	2 plates (each containing 384 assays)
RealTime ready Human ABC Trans- porter Panel, 96	05 339 324 001	2 plates (each containing 96 assays)
RealTime ready Human ABC Trans- porter Panel, 384	05 467 713 001	2 plates (each containing 384 assays)
RealTime ready Human Cell Cycle Regulation Panel, 96	05 339 359 001	2 plates (each containing 96 assays)
RealTime ready Human Cell Cycle Regulation Panel, 384	05 467 683 001	2 plates (each containing 384 assays)
RealTime ready Human GPCR Panel, 96	05 353 068 001	2 plates (each containing 96 assays)
RealTime ready Human GPCR Panel, 384	05 467 705 001	2 plates (each containing 384 assays)
RealTime ready Human Nuclear Receptor Panel, 96	05 339 332 001	2 plates (each containing 96 assays)
RealTime ready Human Nuclear Receptor Panel, 384	05 467 691 001	2 plates (each containing 384 assays)
Real-Time PCR Reaction Mixes		
RealTime ready DNA Probes Master	05 502 381 001	5 x 1 ml (5x conc.)
LightCycler® 480 Probes Master	04 707 494 001	5 x 1 ml (2x conc.)

For life science research only. Not for use in diagnostic procedures.

This LightCycler® 480 Real-Time PCR System is a real-time thermal cycler licensed for research use only under U.S. Patent No. 6,814,934 and corresponding claims in its non-U.S. counterparts, and under one or more of U.S. Patents Nos. 5,475,610, 5,602,756, 6,703,236, 7,238,517, 7,504,241, 7,537,377 or corresponding claims in their non-U.S. counterparts, owned by Applied Biosystems, LLC. No rights are conveyed expressly, by implication or estoppel to any other patent claims. The LightCycler 480 Real-Time PCR System is not cleared for in vitro diagnostic use in the U.S. For further information on purchasing additional rights, contact the Director of Licensing at Applied Biosystems, 850 Lincoln Centre Drive, Foster City, California, 94404, USA. No right is conveyed expressly, by implication, or by estoppel under any other patent claim, such as claims to apparatus, reagents, kits, or methods such as 5' nuclease methods. License rights to practice PCR methods under the foregoing Roche patents for research and other non-in vitro diagnostic applications may be purchased from Applied Biosystems or may be obtained by purchasing licensed reagents from Roche, Applied Biosystems, or other Authorized third party. For information on purchasing licenses for research and other non-in vitro diagnostic applications, contact the Director of Licensing at Applied Biosystems, 850 Lincoln Centre Drive, Foster City, California 94404, USA. A license to practice PCR methods with other real-time detection under patents of F. Hoffmann–La Roche Ltd, and other Roche Molecular Systems („Roche“) for in vitro diagnostic applications may be purchased from Roche or may be obtained by purchasing in vitro diagnostic reagents from Roche or any other Authorized third party. The LightCycler 480 Real-Time PCR System is not cleared for in vitro diagnostic use in the U.S. Practice of the patented 5' Nuclease Process requires a license from Applied Biosystems. The purchase of this product includes an immunity from suit under patents specified in the product insert to use only the amount purchased for the purchaser's own internal research when used with the separate purchase of Licensed Probe. No other patent rights are conveyed expressly, by implication, or by estoppel. Further information on purchasing licenses may be obtained from the Director of Licensing, Applied Biosystems, 850 Lincoln Centre Drive, Foster City, California 94404, USA.

LIGHTCYCLER and REALTIME READY are trademarks of Roche. Other brands or product names are trademarks of their respective holders. © 2009 Roche Diagnostics GmbH. All rights reserved.

Published by: Roche Diagnostics GmbH · Roche Applied Science · Werk Penzberg · 82372 Penzberg · Germany
© 2009 Roche Diagnostics GmbH. All rights reserved.