

Agilent Checkout Kit Quick Start Guide

Agilent Cell Checkout Kit (reorder number 5067-1520)

Cell Assay Chips	Cell Checkout Reagents
7 Checkout Chips	Cell Buffer (● green)
	Focusing Dye Solution (● yellow)
	Chip Priming Solution (○ white)
	Blue Beads (● blue)

Cell Checkout Kit: Specifications

Analysis run time	30 minutes
Number of samples	6
Sample volume	10 µl
Assay kit stability	4 months at 4 °C

Assay Kits

The Agilent Cell kit allows the analysis of pre-stained cells or beads. It can for example be used for the following applications:

- Apoptosis
- Antibody Staining
- siRNA Viability
- GFP Transfection Efficiency
- Gene Silencing
- On-chip staining

Orderable Spare Parts and Accessories

- Pressure Adapter Kit (reorder number 5065-4478)
- Cell Test Chip Kit (reorder number G2938-68200)

Cell Kits

- Agilent Cell Kit (reorder number 5067-1519)
- Agilent Cell Checkout Kit (reorder number 5067-1520)

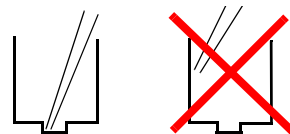
Additional material required (not supplied with the kit)

- Pipettes (10 µl, 100 µl and 1000 µl) with compatible tips
- 1.5 ml or 0.5 ml microcentrifuge tubes for buffer and sample preparation
- Vortex mixer



Essential Measurement Practices

- Handle and store all reagents according to the instructions on the label of the individual box.
- Avoid sources of dust or other contaminants. Foreign matter in reagents and samples or in the wells of the chip will interfere with assay results.
- Keep all reagent and reagent mixes refrigerated at 4 °C when not in use.
- Allow all reagents and samples to equilibrate to room temperature for 30 minutes before use.
- Protect focusing dye and fluorescent beads from light. Remove light covers only when pipetting. The dye decomposes when exposed to light and this reduces the signal intensity.
- Always insert the pipette tip to the bottom of the well when dispensing the liquid. Placing the pipette at the edge of the well may lead to poor results.
- For chip preparation, use inverse pipetting.



NOTE

Inverse pipetting:

When filling the pipette tip, push slightly over the first resistance. Empty the pipette tip only to the first resistance. This procedure avoids the introduction of bubbles and ensures pipetting the right volume. Do not touch the Agilent 2100 bioanalyzer during analysis and never place it on a vibrating surface.

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- Never leave any wells empty, or the pressure adapter may become clogged. Pipette 10 µl of cell buffer or sample replicate in any empty sample well.
 - Before bead preparation, vortex bead vial for 15 s.
 - Prepared chips must be used within 5 minutes. If a chip is not run within 5 minutes reagents may evaporate leading to poor results.
 - Don't touch the Agilent 2100 bioanalyzer during a run and never place it on a vibrating surface.
 - Never touch the instrument lens. Refer to the *2100 Expert Maintenance & Troubleshooting Guide* for lens maintenance.

Agilent Cell Checkout Assay kit guide

Find the full printable Cell Checkout Assay Assay kit guide within the *2100 Expert help menu* in the list of related documents.

Application notes

For hints on staining optimization, handling or experimental setup check for detailed Application Notes at www.agilent.com/chem/labonachip.

Agilent Checkout Kit Protocol - Edition Januar 2006

WARNING



Handling reagents

The handling of reagents and chemicals might hold health risks.

⇒ Wear hand and eye protection and follow good laboratory practices when preparing and handling reagents and samples.

⇒ All reagents should be handled with care usual when dealing with chemicals.

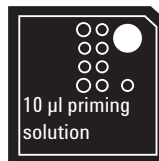
For further chemical and biological safety information please refer to the Agilent Technologies 2100 Bioanalyzer Installation and Safety Manual.

Preparing the beads

- 1 Allow all reagents and samples to warm up to room temperature 30 minutes before use.
- 2 Vortex bead vials for 15 seconds.
- 3 Pipette 95 µl of cell buffer (● green) into a 0.5 ml microfuge tube.
- 4 Add 5 µl of beads (● blue).
- 5 Vortex for 15 seconds.
- 6 Load the prepared beads onto the chip after loading chip priming solution, focusing dye solution and cell buffer. Store the beads in the dark at room temperature and use within one day.

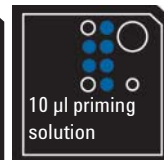
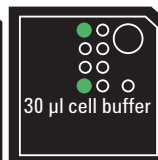
Loading the Chip Priming Solution

- 1 Pipette 10 µl of priming solution (○ white) in the priming well (PS).
- 2 Wait for 60 seconds.



Loading the Focusing Dye Solution, Cell Buffer and Beads

- 1 Pipette 10 µl of focusing dye solution (● yellow) into the focusing well (FD).
- 2 Pipette 30 µl of cell buffer (● green) into each of the 2 buffer wells (CB).
- 3 Pipette 10 µl of prepared beads in each of the 6 sample wells.
- 4 Place prepared chip in the Agilent 2100 bioanalyzer and start the run within 5 minutes.



Technical Support In the U.S./Canada: 1-800-227-9770 (toll free); bioanalyzer_americas@agilent.com. In Europe: bioanalyzer_europe@agilent.com. In Japan: 0120 477 111; lab_chip@agilent.com. In Asia Pacific: (+81) 422 56 93 92; bioanalyzer_ap@agilent.com

Further Information Visit Agilent Technologies' unique Lab-on-a-Chip web site offering useful information, support and current developments about the products and technology: <http://www.agilent.com/chem/labonachip>.

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