

# PCR Starter Kit

## For MiniAmp™ and MiniAmp™ Plus PCR systems

Part. No. 100070431

Revision C.0



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## Product description

The PCR Starter Kit contains sample consumables necessary to start using your new Applied Biosystems™ Thermal Cycler. These consumables are designed to promote efficient heat transfer to obtain fast, high-performance polymerase chain reaction (PCR).

The table below lists the samples included in the kit. It does not list the actual quantities of the starter kit components. To re-order any of these items refer to the catalog number.

**Note:** For safety and biohazard guidelines, refer to the “Safety” appendix in the user guide for your thermal cycler. Read the Safety Data Sheets (SDSs) and follow the handling instructions. Wear appropriate protective eyewear, clothing, and gloves.

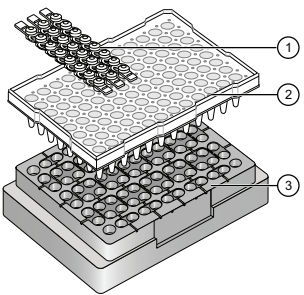
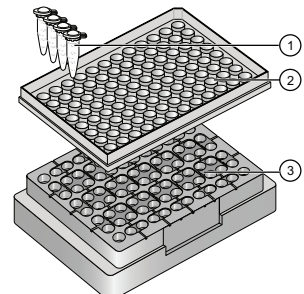
## Kit contents

Component	Cat. No.	Quantity <sup>[1]</sup>	Image
MicroAmp™ Optical 8-Tube Strip with attached optical caps, 0.2 mL	A30588	12 pc	
MicroAmp™ Splash-Free 96-well Base	4312063	1 ea	
MicroAmp™ 96-well Tray/Retainer Set	4381850	1 ea	
MicroAmp™ 96-Well Tray for VeriFlex™ Blocks	4379983	1 ea	

[1] This number refers to the quantity included in the starter kit, and may differ from the quantity received when re-ordering components using the catalog numbers provided in the table.

# How to use the MicroAmp™ Splash-free 96-well Base

The MicroAmp™ Splash-free 96-well Base is compatible for use with MicroAmp™ reaction plates, tube strips, or reaction tubes, and provides a stable platform from which you can set up your experiment.

Step		Action	
1	Set up base and add reaction mix	<p>a. Set up the 96-well base.</p> <ul style="list-style-type: none"> <li>▪ If using reaction plates, place the PCR plate on the base.</li> <li>▪ If using tubes, place the tray on the base and load the tray with tubes.<sup>[1]</sup></li> </ul> <p>b. Pipette the reaction mix into the tubes/wells.</p> <p>c. Seal the plate/tubes.</p> <ul style="list-style-type: none"> <li>▪ If using reaction plates, seal the PCR plate with adhesive film.</li> <li>▪ If using tubes, cap the tubes with the Cap Installing Tool.</li> </ul>	 <ol style="list-style-type: none"> <li>① MicroAmp™ 8-Cap Strip or adhesive film</li> <li>② MicroAmp™ Optical 96-Well Reaction Plate</li> <li>③ MicroAmp™ Splash Free 96-Well Base</li> </ol>
2	Place plate or tubes into instrument	<p>a. Remove the plate or tray with tubes from the 96-well base.</p> <p>b. Place the plate or tray with tubes into the sample block.</p>	 <ol style="list-style-type: none"> <li>① MicroAmp™ Reaction Tube</li> <li>② MicroAmp™ 96-Well Tray for Veriflex™ Blocks</li> <li>③ MicroAmp™ Splash Free 96-Well Base</li> </ol>

[1] For details on using MicroAmp™ tubes/strips, see "How to use the MicroAmp™ 96-well Tray and Retainer" (page 6) or "How to use the MicroAmp™ 96-well Tray for Veriflex™ Blocks" (page 8).

## How to use the MicroAmp™ 96-well Tray and Retainer

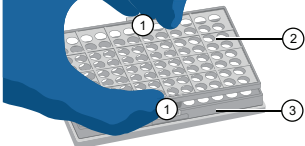
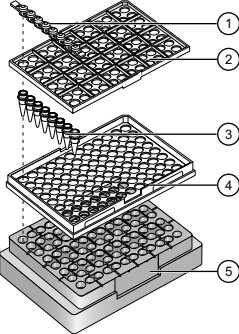
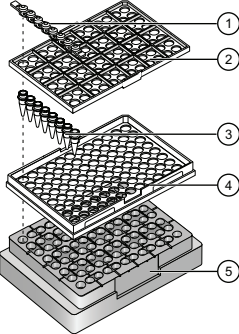
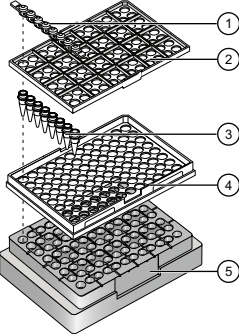
The MicroAmp™ 96-well Tray and MicroAmp™ 96-well Retainer (Cat. No. 4381850) are used to distribute pressure evenly across the sample block.

- The tray and retainer set is compatible for use with MicroAmp™ **single tubes or tube strips** with **separate** cap strips.
- The tray by itself is compatible for use with MicroAmp™ **tube strips** with **attached** caps.

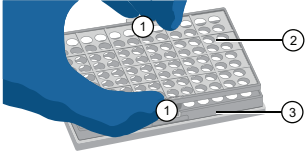
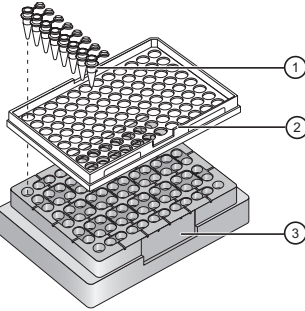
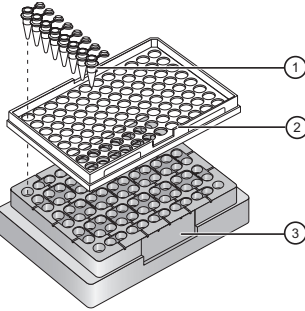
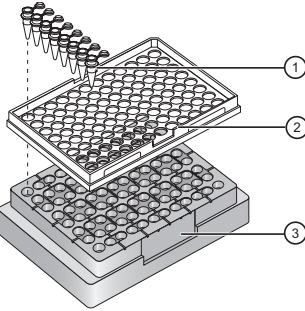
When small numbers of tubes (1–2 tube strips) are placed in the sample block without support, they can be crushed or deformed when the lid of the thermal cycler is closed over the block. Using the tray and retainer set allows the pressure to be distributed evenly over the tubes to ensure a proper seal, and prevent damage.

Using the tray and retainer set is optional when using  $\geq 3$  tube strips that are distributed evenly across the block.

## Prepare samples using MicroAmp™ tubes/tube strips with separate cap strips

Step		Action	
1	Separate tray and retainer	<ol style="list-style-type: none"> <li>Squeeze the release catches on the sides of the assembly to release the <b>blue</b> retainer.</li> <li>Separate the <b>blue</b> tray and retainer.</li> </ol>	 <ol style="list-style-type: none"> <li>Release catch</li> <li>MicroAmp™ 96-Well Retainer</li> <li>MicroAmp™ 96-Well Tray</li> </ol>
2	Load the tray	<ol style="list-style-type: none"> <li>Place the <b>blue</b> tray on a 96-well base.</li> <li>Load the tubes/tube strips into the tray.</li> </ol>	 <ol style="list-style-type: none"> <li>MicroAmp™ 8-Cap Strip</li> <li>MicroAmp™ 96-Well Retainer</li> <li>MicroAmp™ 8-Tube Strip (0.2-mL) or MicroAmp™ Reaction Tube without Cap (0.2-mL)</li> <li>MicroAmp™ 96-Well Tray</li> <li>MicroAmp™ Splash Free 96-Well Base</li> </ol>
3	Fill and cap tubes	<ol style="list-style-type: none"> <li>Pipette the reaction mix into the tubes.</li> <li>Place the <b>blue</b> retainer over the tubes and snap the retainer into the tray.</li> <li>Cap the tubes with a cap strip, and seal with the Cap Installing Tool.</li> </ol>	 <ol style="list-style-type: none"> <li>MicroAmp™ 8-Cap Strip</li> <li>MicroAmp™ 96-Well Retainer</li> <li>MicroAmp™ 8-Tube Strip (0.2-mL) or MicroAmp™ Reaction Tube without Cap (0.2-mL)</li> <li>MicroAmp™ 96-Well Tray</li> <li>MicroAmp™ Splash Free 96-Well Base</li> </ol>
4	Place tray/retainer and tubes into instrument	<ol style="list-style-type: none"> <li>Remove the <b>blue</b> tray/retainer assembly containing the sealed tubes from the 96-well base.</li> <li>Place the assembly with sealed tubes into the sample block.</li> </ol>	 <ol style="list-style-type: none"> <li>MicroAmp™ 8-Cap Strip</li> <li>MicroAmp™ 96-Well Retainer</li> <li>MicroAmp™ 8-Tube Strip (0.2-mL) or MicroAmp™ Reaction Tube without Cap (0.2-mL)</li> <li>MicroAmp™ 96-Well Tray</li> <li>MicroAmp™ Splash Free 96-Well Base</li> </ol>

## Prepare samples using MicroAmp™ tube strips with attached caps

Step	Action	
<p><b>1</b></p> <p>Separate tray and retainer</p>	<p>a. Squeeze the release catches on the sides of the assembly to release the <b>blue</b> retainer.</p> <p>b. Separate the <b>blue</b> tray and retainer.</p>	 <p>① Release catch ② MicroAmp™ 96-Well Retainer ③ MicroAmp™ 96-Well Tray</p>
<p><b>2</b></p> <p>Load the tray</p>	<p>a. Place the <b>blue</b> tray on a 96-well base.</p> <p>b. Load the tube strips into the tray.</p>	 <p>① MicroAmp™ 8-Tube Strip with Attached Caps (0.2-mL) ② MicroAmp™ 96-Well Tray ③ MicroAmp™ Splash Free 96-Well Base</p>
<p><b>3</b></p> <p>Fill and cap tubes</p>	<p>a. Pipette the reaction mix into the tubes.</p> <p>b. Cap the tube strips and seal with the Cap Installing Tool.</p>	 <p>① MicroAmp™ 8-Tube Strip with Attached Caps (0.2-mL) ② MicroAmp™ 96-Well Tray ③ MicroAmp™ Splash Free 96-Well Base</p>
<p><b>4</b></p> <p>Place retainer and tubes into instrument</p>	<p>a. Remove the <b>blue</b> tray and sealed tube strips from the 96-well base.</p> <p>b. Place the tray and sealed tube strips into the sample block.</p>	 <p>① MicroAmp™ 8-Tube Strip with Attached Caps (0.2-mL) ② MicroAmp™ 96-Well Tray ③ MicroAmp™ Splash Free 96-Well Base</p>

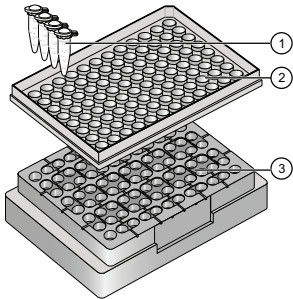
## How to use the MicroAmp™ 96-well Tray for Veriflex™ Blocks

The MicroAmp™ 96-well Tray for Veriflex™ Blocks (Cat. No. 4379983) is used to distribute pressure evenly across the sample block. The tray is compatible for use with **single** MicroAmp™ reaction tubes with attached caps.

When small numbers of tubes ( $\leq 8-16$  tubes) are placed in the sample block without support, they can be crushed or deformed when the lid of the thermal cycler is closed over the block. Using the tray and retainer set allows the pressure to be distributed evenly over the tubes to ensure a proper seal, and prevent damage.

Using the tray and retainer set is optional when using  $\geq 16$  tubes that are distributed evenly across the block.

### Prepare samples using MicroAmp™ reaction tubes

Step		Action	
<b>1</b>	Load the tray	a. Place the <b>black</b> tray on a 96-well base. b. Load the tubes into the tray.	 <p>           ① MicroAmp™ Reaction Tube            ② MicroAmp™ 96-Well Tray for Veriflex™ Blocks            ③ MicroAmp™ Splash Free 96-Well Base         </p>
<b>2</b>	Fill and cap tubes	a. Pipette the reaction mix into the tubes. b. Cap the tubes.	
<b>3</b>	Place tray and tubes into instrument	a. Remove the <b>black</b> tray containing the sealed tubes from the 96-well base. b. Load the <b>black</b> tray containing the sealed tubes into the sample block.	

### Limited product warranty

Life Technologies Corporation and/or its affiliate(s) warrant their products as set forth in the Life Technologies' General Terms and Conditions of Sale found on Life Technologies' website at [www.thermofisher.com/us/en/home/global/terms-and-conditions.html](http://www.thermofisher.com/us/en/home/global/terms-and-conditions.html). If you have any questions, please contact Life Technologies at [www.thermofisher.com/support](http://www.thermofisher.com/support).



## MicroAmp™ plastic consumables for Applied Biosystems™ PCR systems

These consumables are compatible with MicroAmp™ and MicroAmpPlus™ PCR systems with 96-well 0.2 mL blocks. Go to [thermofisher.com/plastics](http://thermofisher.com/plastics) for additional details.

Product	Catalog No.
<b>96-well 0.2 mL reaction plates</b>	
Optical 96-Well Plate	N8010560, 4316813
Optical 96-Well Plate with Barcode	4306737, 4326659
96-Well Plate with Barcode & Optical Caps	403012
Optical 96-Well Plate with Barcode & Optical Adhesive Films	4314320
EnduraPlate Optical 96-Well Clear Plate with Barcode <sup>[1]</sup>	4483354, 4483352
TriFlex 3 x 32-Well Reaction Plate	A32810, A32811
<b>Strip tubes and caps</b>	
Optical 8-Tube Strip with Attached Optical Caps, 0.2 mL	A30588
8-Tube Strip with Attached Domed Caps, 0.2 mL	A30589
8-Tube Strip, 0.2 mL <sup>[1]</sup>	N8010580
Optical 8-Tube Strip, 0.2 mL	4316567
8-Cap Strip <sup>[1]</sup>	N8010535, N8011535
Optical 8-Cap Strip	4323032
12-Cap Strip <sup>[1]</sup>	N8010534, N8011534
<b>Single tubes</b>	
Reaction Tube with Cap, 0.2 mL <sup>[1]</sup>	N8010540, N8010612, N8011540
Reaction Tube without Cap, 0.2 mL <sup>[1]</sup>	N8010533, N8011533
Optical Tube without Cap, 0.2 mL	N8010933
<b>Seals and covers</b>	
Clear Adhesive Film	4306311
Optical Adhesive Film	4360954, 4311971
32-Well Clear Adhesive Film	A32812
<b>Seals and covers</b>	
Splash-Free 96-Well Base	4312063
96-Well Support Base	4379590
96-Well Base	N8010531
96-Well Reaction Tube/Tray/Retainer Set, 0.2 mL	403083, 403086

[1] Multiple colors are available.

# MicroAmp™ plastic compatibility chart

Product	Catalog No.
<b>96-well 0.2 mL reaction plates</b>	
Optical 96-Well Plate	N8010560, 4316813
Optical 96-Well Plate with Barcode	4306737, 4326659
96-Well Plate with Barcode & Optical Caps	403012
Optical 96-Well Plate with Barcode & Optical Adhesive Films	4314320
EnduraPlate Optical 96-Well Clear Plate with Barcode <sup>[1]</sup>	4483354, 4483352
TriFlex 3 x 32-Well Reaction Plate <sup>[2]</sup>	A32810, A32811
<b>96-well 0.1 mL reaction plates</b>	
Fast Optical 96-Well Plate, 0.1 mL	4346907
Fast Optical 96-Well Plate with Barcode, 0.1 mL	4346906, 4366932
EnduraPlate Optical 96-Well Fast Clear Plate with Barcode <sup>[1]</sup>	4483485, 4483494
<b>384-well reaction plates</b>	
Optical 384-Well Plate	4343370
Optical 384-Well Plate with Barcode	4309849, 4326270, 4343814
EnduraPlate Optical 384-Well Clear Plate with Barcode <sup>[1]</sup>	4483285, 4483273
<b>Strip tubes and caps</b>	
Fast 8-Tube Strip, 0.1 mL	4358293
Optical 8-Tube Strip with Attached Optical Caps, 0.2 mL	A30588
8-Tube Strip with Attached Domed Caps, 0.2 mL	A30589
8-Tube Strip, 0.2 mL <sup>[1]</sup>	N8010580
Optical 8-Tube Strip, 0.2 mL	4316567
8-Cap Strip <sup>[1]</sup>	N8010535, N8011535
Optical 8-Cap Strip	4323032
12-Cap Strip <sup>[1]</sup>	N8010534, N8011534
<b>Single tubes</b>	
Fast Reaction Tube with Cap, 0.1 mL	4358297, 4358293
Reaction Tube with Cap, 0.2 mL <sup>[1]</sup>	N8010540, N8010612, N8011540
Reaction Tube without Cap, 0.2 mL <sup>[1]</sup>	N8010533, N8011533
Optical Tube without Cap, 0.2 mL	N8010933
<b>Seals and covers</b>	
Clear Adhesive Film	4306311
Optical Adhesive Film	4360954, 4311971
32-Well Clear Adhesive Film <sup>[2]</sup>	A32812
<b>Seals and covers</b>	
Splash-Free 96-Well Base	4312063
96-Well Support Base	4379590
96-Well Base	N8010531
96-Well Reaction Tube/Tray/Retainer Set, 0.2 mL	403083, 403086

[1] Multiple colors are available.

[2] Do not use MicroAmp™ 3 × 32-Well Retainer.

3 x 32-well	96-well, 0.2 mL	96-well, 0.1 mL (Fast)	384-well
ProFlex™	MiniAmp™, MiniAmp™ Plus, Veriti™, ProFlex™, SimpliAmp™	Veriti™	ProFlex™, Veriti™
96-well 0.2 mL reaction plates			
–	●	–	–
–	●	–	–
–	●	–	–
–	●	–	–
–	●	–	–
● <sup>[2]</sup>	●	–	–
96-well 0.1 mL reaction plates			
–	–	●	–
–	–	●	–
–	–	●	–
384-well reaction plates			
–	–	–	●
–	–	–	●
–	–	–	●
Strip tubes and caps			
–	–	●	–
●	●	–	–
●	●	–	–
●	●	–	–
●	●	–	–
●	●	●	–
●	●	●	–
–	●	●	–
Single tubes			
–	–	●	–
●	●	–	–
●	●	–	–
●	●	–	–
Seals and covers			
–	●	●	●
–	●	●	●
● <sup>[2]</sup>	●	–	–
Seals and covers			
–	●	●	–
–	●	●	–
–	●	–	–
–	–	–	–

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6 February 2018

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