

# IonCode™ Barcode Adapters 1–384 Kit

Catalog Number A29751

Pub. No. MAN0014640 Rev. A.0

**WARNING!** Read the Safety Data Sheets (SDSs) and follow the handling instructions. Wear appropriate protective eyewear, clothing, and gloves. Safety Data Sheets (SDSs) are available from [thermofisher.com/support](http://thermofisher.com/support).

## Description

The IonCode™ Barcode Adapters 1-384 Kit provides a set of 384 unique barcode adapters specifically designed for optimal performance with the Ion PGM™, Ion Proton™, Ion S5™, and Ion S5™ XL sequencers. When used in combination with the Ion AmpliSeq™ Library Kit 2.0, this kit enables pooling of up to 384 amplicon libraries for multiplex sequence analysis. This simplifies the Ion sequencing workflow for a wide range of applications, including targeted enrichment.

## Kit contents and storage

Contents	Quantity	Storage
IonCode™ Barcode Adapters 1–384 (3840 reactions):	1 set of 4 plates (10 reactions per barcode)	–30°C to –5°C
<ul style="list-style-type: none"> <li>IonCode™ 0101–0196 in 96-well PCR Plate (red)</li> <li>IonCode™ 0201–0296 in 96-well PCR Plate (yellow)</li> <li>IonCode™ 0301–0396 in 96-well PCR Plate (green)</li> <li>IonCode™ 0401–0496 in 96-well PCR Plate (blue)</li> </ul>		

## Handling and storage guidelines

To ensure the proper function of the IonCode™ Barcode Adapters, handle and store the associated consumables and reagents according to the following guidelines:

- The kit is shipped on dry ice, but store under the recommended conditions (–30°C to –5°C) and in an upright position.
- Inspect plates for damage upon arrival and again before use.
- Centrifuge plate at 1000 × g after thawing to collect contents at the bottom of the wells.

## Barcode layout

The Barcode layout in each plate follows the numbering scheme shown here.

1	9	17	25	33	41	49	57	65	73	81	89
2	10	18	26	34	42	50	58	66	74	82	90
3	11	19	27	35	43	51	59	67	75	83	91
4	12	20	28	36	44	52	60	68	76	84	92
5	13	21	29	37	45	53	61	69	77	85	93
6	14	22	30	38	46	54	62	70	78	86	94
7	15	23	31	39	47	55	63	71	79	87	95
8	16	24	32	40	48	56	64	72	80	88	96

## Set up a typical amplicon library barcode adapter ligation reaction

IonCode™ Barcode Adapters are premixed with P1 Adapter, so the setup of ligation reactions is simplified.

- Starting with a 22 µL FuPa Reagent digestion reaction in a 96-well PCR plate, assemble the following ligation reaction:

Component	Volume
Switch Solution	4 µL
IonCode™ Barcode Adapter <sup>[1]</sup>	2 µL
Total volume (includes 22 µL of digestion reaction)	28 µL

<sup>[1]</sup> No mixing with P1 Adapter or diluting is necessary.

- Add 2 µL of DNA Ligase to each well (30 µL total volume).
- Vortex thoroughly, or mix by pipetting up and down.
- Seal the reaction plate with MicroAmp™ Clear Adhesive Film (Cat. no. 4306311) or equivalent, and incubate reactions according to the appropriate library preparation guide.
- Reseal the IonCode™ Barcode Adapter plate with adhesive film and store at –30°C to –5°C.

## Customer and technical support

Visit [thermofisher.com/support](http://thermofisher.com/support) for the latest in services and support, including:

- Worldwide contact telephone numbers
  - Product support, including:
    - Product FAQs
    - Software, patches, and updates
  - Order and web support
  - Product documentation, including:
    - User guides, manuals, and protocols
    - Certificates of Analysis
    - Safety Data Sheets (SDSs; also known as MSDSs)
- Note:** For SDSs for reagents and chemicals from other manufacturers, contact the manufacturer.

## 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).

The information in this guide is subject to change without notice.

### DISCLAIMER

TO THE EXTENT ALLOWED BY LAW, LIFE TECHNOLOGIES AND/OR ITS AFFILIATE(S) WILL NOT BE LIABLE FOR SPECIAL, INCIDENTAL, INDIRECT, PUNITIVE, MULTIPLE, OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH OR ARISING FROM THIS DOCUMENT, INCLUDING YOUR USE OF IT.

Important Licensing Information: These products may be covered by one or more Limited Use Label Licenses. By use of these products, you accept the terms and conditions of all applicable Limited Use Label Licenses.

Corporate entity: Life Technologies | Carlsbad, CA 92008 USA | Toll Free in USA 1.800.955.6288

©2015 Thermo Fisher Scientific Inc. All rights reserved. All trademarks are the property of Thermo Fisher Scientific and its subsidiaries unless otherwise specified.

For support visit [thermofisher.com/support](http://thermofisher.com/support) or email [techsupport@lifetech.com](mailto:techsupport@lifetech.com)

[thermofisher.com](http://thermofisher.com)

**ThermoFisher**  
S C I E N T I F I C