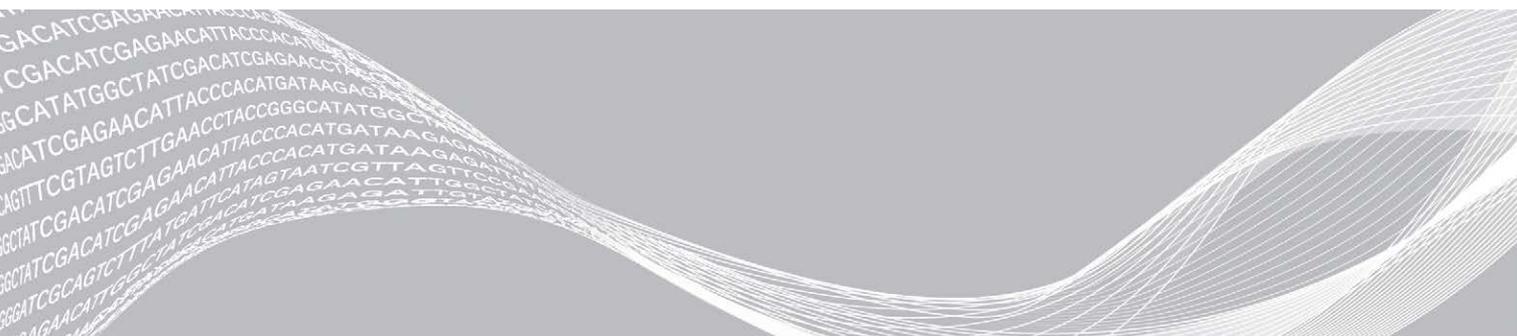


# MiSeq System

## Site Prep Guide

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## Introduction

This guide provides specifications and guidelines for preparing your site for installation and operation of the Illumina® MiSeq® system.

- ▶ Laboratory space requirements
- ▶ Electrical requirements
- ▶ Environmental constraints
- ▶ Computing requirements
- ▶ User-supplied consumables and equipment

## Safety Considerations

See the *MiSeq System Safety and Compliance Guide (document # 15027616)* for important information about safety considerations.

## Additional Resources

The **MiSeq system support pages** on the Illumina website provide additional resources. These resources include software, training, compatible products, and the following documentation. Always check support pages for the latest versions.

| Resource  | Description  |
|---|--|
| <a href="#">Custom Protocol Selector</a>                                      | A tool for generating end-to-end instructions tailored to your library prep method, run parameters, and analysis method, with options to refine the level of detail.               |
| <i>MiSeq System Safety and Compliance Guide (document # 15027616)</i>         | Provides information about operational safety considerations, compliance statements, and instrument labeling.  |
| <i>MiSeq Sample Sheet Quick Reference Guide (document # 15028392)</i>         | Provides information about adding sample sheet settings to your sample sheet.  |
| <i>MiSeq System Denature and Dilute Libraries Guide (document # 15039740)</i> | Provides instructions for denaturing and diluting prepared sample libraries before sequencing on the MiSeq, and preparing a PhiX control. This step applies to most library types. |
| <i>MiSeq Custom Primers Guide (document # 15041638)</i>                       | Provides instructions for preparing and loading custom primers, and editing the samples sheet for custom primers.  |

| Resource  | Description   |
|---|---|
| <i>MiSeq Sequencing System Guide (document # 15027617)</i>            | Provides an overview of the instrument and associated procedures. Instrument components, reagent components, instructions for use, and maintenance and troubleshooting procedures are included. |
| <i>Local Run Manager v3 Software Guide (document # 1000000111492)</i> | Provides an overview of the Local Run Manager software, instructions for using software features, and instructions for installing analysis modules on the instrument computer.                  |
| <i>BaseSpace User Guide (document # 15044182)</i>                     | Provides instructions for using BaseSpace and descriptions of the graphs generated for each analysis workflow.  |

## Delivery and Installation

An authorized service provider delivers the system, uncrates components, and places the instrument on the lab bench. Make sure that the lab space and bench are ready before delivery.



### CAUTION

Only authorized personnel can uncrate, install, or move the instrument. Mishandling of the instrument can affect the alignment or damage instrument components.

An Illumina representative installs and prepares the instrument. When connecting the instrument to a data management system or remote network location, make sure that the path for data storage is selected before the date of installation. The Illumina representative can test the data transfer process during installation.



### CAUTION

After your Illumina representative has installed and prepared the instrument, **do not** relocate the instrument. Moving the instrument improperly can affect the optical alignment and compromise data integrity. If you have to relocate the instrument, contact your Illumina representative.

## Crated Dimensions and Contents

The MiSeq is shipped in one crate. Use the following dimensions to determine the minimum door width required to accommodate the shipping container.

| Measurement | Crated Dimensions   |
|-------------|---------------------|
| Width       | 72.4 cm (28.5 in.)  |
| Height      | 76.8 cm (30.25 in.) |
| Depth       | 83.8 cm (33 in.)    |
| Weight      | 90.7 kg (200 lbs.)  |

The crate contains the MiSeq instrument along with the following components:

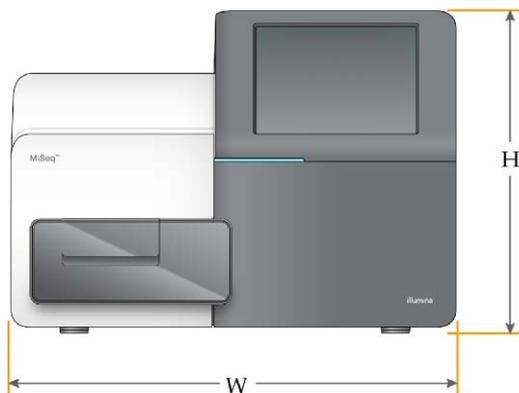
- ▶ Waste bottle, drip tray, and two labels for shipping restraint locations.

- ▶ MiSeq Accessories Kit, which contains the following components:
  - ▶ *MiSeq System User Guide (document # 15027617)*
  - ▶ *MiSeq System Safety and Compliance Guide (document # 15027616)*
  - ▶ Wash tray
  - ▶ Wash bottle, 500 ml
  - ▶ Waste bottle stopper (red)
  - ▶ T-handle hex-drive tool, 6 mm
  - ▶ T-handle hex-drive tool, 5/64 in.
  - ▶ Network cable, shielded CAT6
- ▶ Power cord

## Laboratory Requirements

This section provides requirements and guidelines to set up your lab space for the MiSeq properly. For more information, see *Environmental Considerations* on page 9.

## Instrument Dimensions



| Measurement | Installed Instrument Dimensions |
|-------------|---------------------------------|
| Height      | 68.6 cm (27 in.)                |
| Width       | 52.3 cm (20.6 in.)              |
| Depth       | 56.5 cm (22.2 in.)              |
| Weight      | 57.2 kg (126 lbs.)              |

## Placement Requirements

Position the instrument to allow proper ventilation and access for servicing. Use the following minimum clearance dimensions to make sure that the instrument is accessible from all sides.

| Access | Minimum Clearance   |
|--------|---|
| Sides  | Allow at least 61 cm (24 in.) on each side of the instrument.   |
| Rear   | Allow at least 10.2 cm (4 in.) behind the instrument.   |
| Top    | Allow at least 61 cm (24 in.) above the instrument. If the instrument is positioned under a shelf, make sure that the minimum clearance requirement is met. |

- ▶ Make sure that you can reach around the right side of the instrument to access the power switch on the back panel.
- ▶ Position the instrument so that you can quickly disconnect the power cord from the outlet.

**CAUTION**

If you need to relocate the MiSeq, contact your Illumina representative. Moving the instrument improperly can impact the optical alignment and compromise data integrity.

## Lab Bench Guidelines

Place the instrument on a lab bench without casters. The bench must support the weight of the instrument, which is 57.2 kg (126 lbs.).

| Width          | Height          | Depth           | Casters |
|----------------|-----------------|-----------------|---------|
| 122 cm (48 in) | 91.4 cm (36 in) | 76.2 cm (30 in) | No      |

For North American customers, Illumina recommends the following lab bench: Bench-Tek Solutions ([www.bench-tek.com](http://www.bench-tek.com)), part # BT40CR-3048BS-PS.

## Vibration Guidelines

The MiSeq tolerates vibrations up to 0.406 mm/s for frequencies of 8–80 Hz, which is the normal range for a MiSeq environment. For frequencies less than 8 Hz, vibration tolerance is higher.

Use the following guidelines to minimize vibrations during sequencing runs and ensure optimal performance:

- ▶ Place the instrument on a sturdy immobilized lab bench.
- ▶ Do not install the instrument near frequently used doors. Opening and closing of doors might induce vibrations.
- ▶ Do not install a keyboard tray that hangs below the bench.
- ▶ Do not place other equipment on the bench that can produce vibrations, such as a shaker, vortexer, centrifuge, or instruments with heavy fans.
- ▶ Do not place objects on top of the instrument.
- ▶ Do not touch the instrument or open the reagent compartment or flow cell compartment during sequencing.

## Lab Setup for PCR Procedures

The polymerase chain reaction (PCR) process is used with some Illumina library prep kits to prepare libraries for amplicon sequencing.

For more information, visit the support pages on the Illumina website. Unless you exercise sufficient caution, PCR products can contaminate reagents, instruments, and samples, causing inaccurate and unreliable results. PCR product contamination can adversely affect lab processes and delay normal operations.

**CAUTION**

To prevent PCR product contamination, establish dedicated areas and lab procedures before you begin work in the lab.

## Pre-PCR and Post-PCR Areas

Use the following guidelines to avoid cross-contamination.

- ▶ Establish a pre-PCR area for pre-PCR processes.
- ▶ Establish a post-PCR area for processing PCR products.
- ▶ Do not use the same sink to wash pre-PCR and post-PCR materials.
- ▶ Do not use the same water purification system for pre-PCR and post-PCR areas.
- ▶ Store supplies used for pre-PCR protocols in the pre-PCR area. Transfer them to the post-PCR area as needed.

## Dedicate Equipment and Supplies

- ▶ Do not share equipment and supplies between pre-PCR and post-PCR processes. Dedicate a separate set of equipment and supplies in each area.
- ▶ Establish dedicated storage areas for consumables used in each area.

## Electrical Requirements

### Power Specifications

| Type              | Specification               |
|-------------------|-----------------------------|
| Line Voltage      | 100–240 Volts AC @ 50/60 Hz |
| Power Consumption | 400 Watts                   |

An electrical ground is required. If the voltage fluctuates more than 10%, a power line regulator is required.

### Receptacles

Your facility must be wired with the following equipment:

- ▶ **For 100–110 Volts AC**—A 10-amp grounded, dedicated line with proper voltage and electrical ground is required.  
North America and Japan—Receptacle: NEMA 5-15
- ▶ **For 220–240 Volts AC**—A 6-amp grounded line with proper voltage and electrical ground is required.
- ▶ If the voltage fluctuates more than 10%, a power line regulator is required.

### Protective Earth



The instrument has a connection to protective earth through the enclosure. The safety ground on the power cord returns protective earth to a safe reference. The protective earth connection on the power cord must be in good working condition when using this device.

### Power Cords

The instrument is equipped with an international standard IEC 60320 C13 receptacle and is shipped with a region-specific power cord.

Hazardous voltages are removed from the instrument only when the power cord is disconnected from the AC power source.

To obtain equivalent receptacles or power cords that comply with local standards, consult a third-party supplier such as Interpower Corporation ([www.interpower.com](http://www.interpower.com)).

**CAUTION**

Never use an extension cord to connect the instrument to a power supply.

## Fuses

The MiSeq contains no user-replaceable fuses.

## Uninterruptible Power Supply

Illumina recommends the use of a user-supplied uninterruptible power supply (UPS). Illumina is not responsible for runs affected by interrupted power regardless of whether the instrument is on a UPS. Standard generator-backed power is often not uninterruptible and a brief power outage occurs before power resumes, which interrupts a sequencing run.

Table 1 Region-Specific Recommendations

| Specification                   | Japan<br>APC Smart-UPS<br>Part #SUA1500JB | North America<br>APC Back-UPS Pro<br>Part # BR1500MS | International<br>APC Back-UPS Pro<br>Part # BR1500MSI |
|---------------------------------|---|--|---|
| Maximum Output Power            | 980 W / 1500 VA                           | 900 W / 1500 VA                                      | 865 W / 1500 VA                                       |
| Input Voltage (nominal)         | 100 VAC                                   | 120 VAC  | 230 VAC   |
| Input Connection                | NEMA 5-15P                                | NEMA 5-15P   | IEC-320 C14   |
| Typical Run Time<br>(50% load)  | 23.9 minutes                              | 14.5 minutes   | 15.8 minutes  |
| Typical Run Time<br>(100% load) | 6.7 minutes                               | 4.1 minutes  | 5.5 minutes   |

To obtain an equivalent UPS that complies with local standards for facilities outside the referenced regions, consult a third-party supplier such as Interpower Corporation ([www.interpower.com](http://www.interpower.com)).

## Product Certifications and Compliance

The MiSeq is certified to the following standards:

- ▶ UL STD 61010-1
- ▶ CSA STD C22.2 No 61010-1
- ▶ IEC/EN 61010-1
- ▶ IEC/EN 61326-1
- ▶ IEC/EN 61326-2-6

The MiSeq complies with the following directives:

- ▶ Low Voltage Directive 2006/95/EC
- ▶ EMC Directive 2004/108/EC
- ▶ R&TTE Directive 1999/5/EC

## Environmental Considerations

| Element     | Specification   |
|-------------|---|
| Temperature | Transportation and Storage: -10°C to 40°C (14°F to 104°F).<br>Operating Conditions: 19°C to 25°C (66°F to 77°F).  |
| Humidity    | Transportation and Storage: Non-condensing humidity.<br>Operating Conditions: 30–75% relative humidity (non-condensing).  |
| Elevation   | Locate the instrument at an altitude below 2000 meters (6500 feet).   |
| Air Quality | Operate the instrument in a Pollution Degree II environment or better. A Pollution Degree II environment is defined as an environment that normally includes only nonconductive pollutants. |
| Ventilation | Consult your facilities department for ventilation requirements based on the instrument heat output specifications.   |

## Heat Output

| Measured Power | Thermal Output |
|----------------|----------------|
| 400 Watts      | 1,364 BTU/h    |

## Noise Output

The MiSeq is an air-cooled instrument. Noise from the fan is clearly audible when the instrument is running.

| Noise Output (dB) | Distance From Instrument |
|-------------------|--------------------------|
| < 62 dB           | 1 meter (3.3 feet)       |

A measurement of < 62 dB is the level of a normal conversation at a distance of approximately 1 meter (3.3 feet).

## Network Considerations

A network connection is recommended due to the amount of data generated by the MiSeq.

- ▶ A shielded CAT6 network cable of 3 meters (9.8 feet) in length is provided with the instrument.

To use the following features, network and internet connections are required:

- ▶ Receive and install software updates from the MiSeq Control Software (MCS) interface.
- ▶ Access manifest files, sample sheets, and references on a network server from the MCS interface.
- ▶ Easily move data from previous runs and analyses to a server location for storage, and to manage disk space on the integrated MiSeq computer.
- ▶ Monitor the run in progress using the Illumina Sequencing Analysis Viewer software (optional).
- ▶ Monitor and manage secondary analysis using BaseSpace Sequence Hub or analysis software.
- ▶ Use Live Help, an on-instrument feature that connects you to Illumina Technical Support for troubleshooting.

Use the following recommendations to install and configure a network connection:

- ▶ Use a 1 gigabit connection between the instrument and your data management system. This connection can be made directly or through a network switch.

- ▶ Upon connection to a network, configure Windows Update so that the MiSeq does not automatically update. Illumina recommends waiting one month after a Windows release before allowing an update.

## BaseSpace Sequence Hub Domains

The following domains provide access from Universal Copy Service to BaseSpace Sequence Hub and Illumina Proactive. Some Enterprise addresses include a user-defined domain field. This custom field is reserved with {domain}.

| Instance                   | Address  |
|----------------------------|--|
| US Enterprise              | {domain}.basespace.illumina.com                                    |
|                            | {domain}.api.basespace.illumina.com                                |
|                            | basespace-data-east.s3-external-1.amazonaws.com                    |
|                            | basespace-data-east.s3.amazonaws.com                               |
|                            | instruments.sh.basespace.illumina.com                              |
| EU Enterprise              | {domain}.euc1.sh.basespace.illumina.com                            |
|                            | {domain}.api.euc1.sh.basespace.illumina.com                        |
|                            | euc1-prd-seq-hub-data-bucket.s3.eu-central-1.amazonaws.com         |
|                            | instruments.sh.basespace.illumina.com                              |
| AUS Enterprise             | {domain}.aps2.sh.basespace.illumina.com                            |
|                            | {domain}.api.aps2.sh.basespace.illumina.com                        |
|                            | instruments.sh.basespace.illumina.com                              |
|                            | aps2-sh-prd-seq-hub-data-bucket.s3.ap-southeast-2.amazonaws.com    |
| US Basic and Professional  | basespace.illumina.com   |
|                            | api.basespace.illumina.com   |
|                            | basespace-data-east.s3-external-1.amazonaws.com                    |
|                            | basespace-data-east.s3.amazonaws.com                               |
|                            | instruments.sh.basespace.illumina.com                              |
| EU Basic and Professional  | euc1.sh.basespace.illumina.com                                     |
|                            | api.euc1.sh.basespace.illumina.com                                 |
|                            | euc1-prd-seq-hub-data-bucket.s3.eu-central-1.amazonaws.com         |
|                            | instruments.sh.basespace.illumina.com                              |
| AUS Basic and Professional | aps2.sh.basespace.illumina.com                                     |
|                            | api.aps2.sh.basespace.illumina.com                                 |
|                            | instruments.sh.basespace.illumina.com                              |
|                            | aps2-sh-prd-seq-hub-data-bucket.s3.ap-southeast-2.amazonaws.com    |
| GC Basic and Professional  | cnn1.sh.basespace.illumina.com.cn                                  |
|                            | api.cnn1.sh.basespace.illumina.com.cn                              |
|                            | instruments.sh.basespace.illumina.com.cn                           |
|                            | cn-sh-cnn1-prod-seq-hub-data-bucket.s3.cn-north-1.amazonaws.com.cn |

## Network Support

Illumina does not install or provide technical support for network connections.

Review network maintenance activities for potential compatibility risks with the Illumina system, including the following risks:

- ▶ **Removal of the Group Policy Objects (GPOs)**—GPOs can affect the operating system (OS) of connected Illumina resources. OS changes can disrupt the proprietary software in Illumina systems. Illumina instruments have been tested and verified to operate correctly. After connecting to domain GPOs, some settings might affect the instrument software. If the instrument software operates incorrectly, consult your facility IT administrator about possible GPO interference. If the instrument needs to be bound to a domain, we recommend that you place the instrument in an organizational unit (OU) that is minimally restrictive.
- ▶ **Activation of Windows Firewall and Windows Defender**—These Windows products can affect the OS resources used by Illumina software. Install antivirus software to protect the instrument control computer.
- ▶ **Changes to the privileges of preconfigured users**—Maintain existing privileges for preconfigured users. Make preconfigured users unavailable as needed.
- ▶ **Server Message Block (SMB) file sharing protocol**—SMB v1 is disabled by default on Windows 10 systems. To enable, contact Illumina Technical Support.

## Antivirus Software

An antivirus software of your choice is highly recommended to protect the instrument control computer against viruses.

To avoid data loss or interruptions, configure the antivirus software as follows:

- ▶ Set for manual scans. Do not enable automatic scans.
- ▶ Perform manual scans only when the instrument is not in use.
- ▶ Set updates to download without user authorization, but not install.
- ▶ Do not update during instrument operation. Update only when the instrument is not running and when it is safe to reboot the instrument computer.
- ▶ Do not reboot the computer automatically upon update.
- ▶ Exclude the application directory and data drives from any real-time file system protection. Apply this setting to the C:\Illumina directory, D:\ drive, and E:\ drive.

## User-Supplied Consumables and Equipment

The following user-supplied consumables and equipment are required for sequencing. For more information, see the *MiSeq System User Guide (document # 15027617)*.

### Consumables

Make sure that the following user-supplied consumables are available before beginning a run.

| Consumable                                   | Supplier  | Purpose  |
|--|---|--|
| Stock 1.0 N NaOH, molecular biology-grade    | General lab supplier                              | Denaturing sample libraries and PhiX control DNA |
| Alcohol wipes, 70% Isopropyl or Ethanol, 70% | VWR, catalog # 95041-714*<br>General lab supplier | Cleaning the flow cell holder                    |

| Consumable                              | Supplier                          | Purpose   |
|---|-----------------------------------|---|
| Disposable gloves, powder-free          | General lab supplier              | General use   |
| Lab tissue, low-lint                    | VWR, catalog # 21905-026*         | Cleaning the flow cell stage and the foil seal covering the load samples reservoir              |
| Lens paper, 4 x 6 in                    | VWR, catalog # 52846-001*         | Cleaning the flow cell  |
| Microcentrifuge tubes                   | General lab supplier              | Denaturing and diluting sample libraries and PhiX control DNA                                   |
| MiSeq tubes                             | Illumina,<br>part # MS-102-9999   | Washing the template line, for use with the VeriSeq PGS workflow (optional for other workflows) |
| NaOCl, 5%                               | Sigma-Aldrich, catalog # 239305*  | Washing the template line, for use with the VeriSeq PGS workflow (optional for other workflows) |
| 10 mM Tris-HCl, pH 8.5                  | General lab supplier              | Diluting libraries and an optional PhiX control before denaturation.                            |
| 200 mM Tris-HCl, pH 7.0                 | General lab supplier              | Neutralizing libraries and an optional PhiX control after denaturation                          |
| Tween 20                                | Sigma-Aldrich, catalog # P7949    | Washing the instrument  |
| Tweezers, square-tip plastic (optional) | McMaster-Carr, catalog # 7003A22* | Removing flow cell from flow cell shipping container  |
| Water, laboratory-grade                 | General lab supplier              | Washing the instrument  |

\* or laboratory-grade equivalent

## Guidelines for Laboratory-Grade Water

Always use laboratory-grade water or deionized water to perform instrument procedures. Never use tap water. Use only the following grades of water or equivalents:

- ▶ Deionized water
- ▶ Illumina PW1
- ▶ 18 Megohms (M $\Omega$ ) water
- ▶ Milli-Q water
- ▶ Super-Q water
- ▶ Molecular biology grade water

## Equipment

| Item                                | Source               | Purpose                  |
|-------------------------------------|----------------------|--------------------------|
| Freezer, -25°C to -15°C, frost-free | General lab supplier | Storing the cartridge.   |
| Ice bucket                          | General lab supplier | Setting aside libraries. |
| Refrigerator, 2°C to 8°C            | General lab supplier | Storing the flow cell.   |

## Required Storage Space for Consumables

MiSeq reagents are provided in single-use reagent cartridges. Use the following information to estimate required consumable storage space.

| Item (one per run) | Storage Requirement | Size (W x L x H)                                     |
|--------------------|---------------------|--|
| Reagent cartridge  | -25°C to -15°C      | 11 cm (4.5 in.) x 21 cm (8.25 in.) x 7 cm (2.75 in.) |
| PR2 bottle         | 2°C to 8°C          | 500 ml bottle  |
| Flow cell          | 2°C to 8°C          | 3.7 cm (1.5 in.) x 5.5 cm (2.2 in.)                  |

## Revision History

| Document                | Date           | Description of Change  |
|-------------------------|----------------|--|
| Document # 15027615 v01 | January 2021   | Updated to support MCS v4.0 and Local Run Manager v3.0 upgrade.<br>Updated Network Support section to support system Windows 10 upgrade.<br>Updated and added BSSH domains.<br>Added Tris-Cl 10 mM, pH 8.5 and Tris-HCl, pH-7.0 to the list of user-supplied consumables.<br>Added transportation and storage guidelines for temperature and humidity.   |
| 15027615 Rev. F         | August 2014    | Added compatibility recommendations for network maintenance activities.<br>Updated anti-virus configuration information.<br>Updated product certification and compliance information.<br>Added sodium hypochlorite for template line washes to the list of user-supplied consumables.<br>Added guide information for the VeriSeq workflow to Additional Resources.<br>Updated VWR catalog number for alcohol wipes to 95041-714.<br>Updated SDS link to <a href="http://support.illumina.com/sds.html">support.illumina.com/sds.html</a> . |
| 15027615 Rev. E         | April 2014     | Removed the lab ambient temperature variation specification.<br>Corrected lab temperature range specification to 19°C to 25°C (22°C ±3°C).<br>Corrected lab relative non-condensing humidity specification to 30–75%.  |
| 15027615 Rev. D         | October 2013   | Removed Tris-Cl 10 mM, pH 8.5 from the list of user-supplied consumables.<br>Added Tween 20 for performing instrument washes to the list of user-supplied consumables.<br>Added microcentrifuge tubes to the list of user-supplied consumables.  |
| 15027615 Rev. C         | February 2012  | Added information about moving the MiSeq improperly.   |
| 15027615 Rev. B         | December 2011  | Noted that locating the instrument in a post-PCR laboratory is recommended when sequencing PCR amplicons.<br>Added information about generator-backed power outages on sequencing runs.  |
| 15027615 Rev. A         | September 2011 | Initial release  |

## Technical Assistance

For technical assistance, contact Illumina Technical Support.

Website: [www.illumina.com](http://www.illumina.com)  
 Email: [techsupport@illumina.com](mailto:techsupport@illumina.com)

### Illumina Customer Support Telephone Numbers

| Region           | Toll Free       | Regional       |
|------------------|-----------------|----------------|
| North America    | +1.800.809.4566 |                |
| Australia        | +1.800.775.688  |                |
| Austria          | +43 800006249   | +43 19286540   |
| Belgium          | +32 80077160    | +32 34002973   |
| China            | 400.066.5835    |                |
| Denmark          | +45 80820183    | +45 89871156   |
| Finland          | +358 800918363  | +358 974790110 |
| France           | +33 805102193   | +33 170770446  |
| Germany          | +49 8001014940  | +49 8938035677 |
| Hong Kong, China | 800960230       |                |
| Ireland          | +353 1800936608 | +353 016950506 |
| Italy            | +39 800985513   | +39 236003759  |
| Japan            | 0800.111.5011   |                |
| Netherlands      | +31 8000222493  | +31 207132960  |
| New Zealand      | 0800.451.650    |                |
| Norway           | +47 800 16836   | +47 21939693   |
| Singapore        | +1.800.579.2745 |                |
| South Korea      | +82 80 234 5300 |                |
| Spain            | +34 911899417   | +34 800300143  |
| Sweden           | +46 850619671   | +46 200883979  |
| Switzerland      | +41 565800000   | +41 800200442  |
| Taiwan, China    | 00806651752     |                |
| United Kingdom   | +44 8000126019  | +44 2073057197 |
| Other countries  | +44.1799.534000 |                |

**Safety data sheets (SDSs)**—Available on the Illumina website at [support.illumina.com/sds.html](http://support.illumina.com/sds.html).

**Product documentation**—Available for download from [support.illumina.com](http://support.illumina.com).



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