TruSeq Rapid Exome Library Prep

Protocol Guide

For Research Use Only. Not for use in diagnostic procedures.

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Tagment Genomic DNA

Preparation

- 1 Save the following TAG58 program on the thermal cycler:
 - ▶ Choose the preheat lid option and set to 100°C
 - ▶ 58°C for 10 minutes
 - ▶ Hold at 10°C
 - Each well or tube contains 50 μl.
- 2 Save the following TAG60 program on the thermal cycler:
 - ▶ Choose the preheat lid option and set to 100°C
 - ▶ 60°C for 5 minutes
 - ▶ Hold at 10°C
 - Each well or tube contains 65 μl.

- 1 Quantify gDNA using a fluorometric method.
- 2 Dilute gDNA in Tris-HCl 10 mM, pH 8.5 to a final volume of 10 μl at 5 ng/μl.
- Add the following items in the order listed to a new Hard-Shell PCR plate or to a new 0.2 ml thin-wall PCR tube or 8-tube strip.
 - ► TD (25 µl)
 - Normalized gDNA (10 μl)
 - TDE2 (15 μl)
- 4 Mix thoroughly as follows.
 - ▶ [Plate] Shake at 1800 rpm for 1 minute.
 - ▶ [Tube] Pipette up and down.
- 5 Centrifuge as follows.
 - ▶ [Plate] Centrifuge at 280 × g for 1 minute.
 - ▶ [Tube] Centrifuge briefly.
- 6 Place on the preprogrammed thermal cycler and run the TAG58 program.
- 7 Add 15 µl ST2, and then pipette to mix
- 8 Place on the preprogrammed thermal cycler and run the TAG60 program.

Clean Up Tagmented DNA

- 1 Transfer all supernatant to a new midi plate or to a new 1.5 ml microcentrifuge tube.
- 2 Add 52 µl SPB, and then mix thoroughly as follows.
 - ▶ [Plate] Pipette up and down 10 times.
 - ▶ [Tube] Pipette up and down.
- 3 Incubate at room temperature for 5 minutes.
- 4 Place on a magnetic stand and wait until the liquid is clear (2–5 minutes).
- 5 Transfer 98 μl supernatant to a new midi plate or to a new 1.5 ml microcentrifuge tube.
- 6 Add 137 µl SPB, and then mix thoroughly as follows.
 - ▶ [Plate] Pipette up and down 10 times.
 - ▶ [Tube] Pipette up and down.
- 7 Incubate at room temperature for 5 minutes.
- 8 Place on a magnetic stand and wait until the liquid is clear (2–5 minutes).
- 9 Remove and discard all supernatant.
- 10 Wash 2 times with 200 µl 80% EtOH.
- 11 Using a 20 µl pipette, remove residual 80% EtOH.
- 12 Air-dry on the magnetic stand for 5 minutes.
- 13 Add 22.5 µl RSB, and then mix thoroughly as follows.
 - ▶ [Plate] Shake at 1800 rpm for 1 minute.
 - ▶ [Tube] Pipette up and down.
- 14 Remove from the magnetic stand.
- 15 Incubate at room temperature for 2 minutes.
- 16 Centrifuge as follows.
 - ▶ [Plate] Centrifuge at 280 × g for 1 minute.
 - ▶ [Tube] Centrifuge briefly.
- 17 Place on a magnetic stand and wait until the liquid is clear (2–5 minutes).
- 18 Transfer 20 µl supernatant to a new Hard-Shell PCR plate or to a new 8-tube strip.

Amplify Tagmented DNA

Preparation

- 1 Save the following LAM AMP program on the thermal cycler:
 - ▶ Choose the preheat lid option and set to 100°C
 - ▶ 72°C for 3 minutes
 - ▶ 98°C for 30 seconds
 - ▶ 10 cycles of:
 - ▶ 98°C for 10 seconds
 - ▶ 60°C for 30 seconds
 - ▶ 72°C for 30 seconds
 - ▶ 72°C for 5 minutes
 - ▶ Hold at 10°C
 - Each well or tube contains 50 μl.

Procedure

- 1 [Plate] Arrange Index 1 (i7) adapters in columns 1–12 of the TruSeq Index Plate Fixture.
- 2 [Plate] Arrange Index 2 (i5) adapters in rows A–H of the TruSeq Index Plate Fixture.
- 3 [Plate] Place the plate on the TruSeq Index Plate Fixture.
- 4 Add 5 μl of each Index 1 (i7) adapter as follows.
 - ▶ [Plate] Using a multichannel pipette, add to each column.
 - ▶ [Tube] Add a different index to each tube.
- 5 Replace the cap on each i7 adapter tube with a new orange cap.
- 6 Add 5 µl of each Index 2 (i5) adapter as follows.
 - ▶ [Plate] Using a multichannel pipette, add to each column.
 - ▶ [Tube] Add a different index to each tube.
- 7 Replace the cap on each i5 adapter tube with a new white cap.
- 8 Add 20 µl LAM, and then mix thoroughly as follows.
 - ▶ [Plate] Shake at 1200 rpm for 1 minute.
 - ▶ [Tube] Pipette up and down.
- 9 Centrifuge as follows.
 - ▶ [Plate] Centrifuge at 280 × g for 1 minute.
 - ▶ [Tube] Centrifuge briefly.
- 10 Place on the thermal cycler and run the LAM AMP program.

SAFE STOPPING POINT

If you are stopping, seal the plate or cap the tube and store at 2°C to 8°C for up to 2 days. Alternatively, leave on the thermal cycler overnight.

Clean Up Amplified DNA

Procedure

- 1 Centrifuge at 280 × g for 1 minute.
- 2 Transfer 50 µl total volume to a new midi plate or to a new 1.5 ml microcentrifuge tube.
- 3 Add 90 µl SPB, and then mix thoroughly as follows.
 - ▶ [Plate] Shake at 1800 rpm for 1 minute.
 - ▶ [Tube] Pipette up and down.
- 4 Incubate at room temperature for 5 minutes.
- 5 Centrifuge as follows.
 - ▶ [Plate] Centrifuge at 280 × g for 1 minute.
 - ▶ [Tube] Centrifuge briefly.
- 6 Place on a magnetic stand and wait until the liquid is clear (2–5 minutes).
- 7 Remove and discard all supernatant.
- 8 Wash 2 times with 200 µl 80% EtOH.
- 9 Using a 20 µl pipette, remove residual 80% EtOH.
- 10 Air-dry on the magnetic stand for 5 minutes.
- 11 Add 17 µl RSB, and then mix thoroughly as follows.
 - ▶ [Plate] Shake at 1800 rpm for 1 minute.
 - ▶ [Tube] Pipette up and down.
- 12 Remove from the magnetic stand.
- 13 Incubate at room temperature for 2 minutes.
- 14 Centrifuge as follows.
 - ▶ [Plate] Centrifuge at 280 × g for 1 minute.
 - ▶ [Tube] Centrifuge briefly.
- 15 Place on a magnetic stand and wait until the liquid is clear (~2 minutes).
- 16 Transfer 15 μl supernatant to a new Hard-Shell PCR plate or to a new 1.5 ml microcentrifuge tube or 8-tube strip.
- 17 Quantify the library using a fluorometric method.

SAFE STOPPING POINT

If you are stopping, seal the plate or cap the tube and store at -25°C to -15°C for up to 14 days.

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Hybridize Probes

Preparation

- 1 Save the TRE HYB program on the thermal cycler:
 - ▶ Choose the preheat lid option and set to 100°C
 - ▶ 95°C for 10 minutes
 - ▶ 58°C for 30 minutes
 - **Each** well or tube contains 10 μl.

Pool Libraries

- 1 Combine 500 ng of each DNA library, making sure that each library has a unique index.
 - ▶ If the total volume is > 30 μ l, concentrate the pooled sample to 30 μ l.
 - If the total volume is $< 30 \mu l$, increase the volume to $30 \mu l$ with RSB.

- Add the following reagents in the order listed to a new midi plate or to a new 1.5 ml microcentrifuge tube.
 - DNA library sample or pool (30 μl)
 - ▶ BLR (10 µl)
 - ► CEX (10 µl)
- 2 Mix thoroughly as follows.
 - ▶ [Plate] Shake at 1200 rpm for 1 minute.
 - ▶ [Tube] Pipette up and down.
- 3 Centrifuge as follows.
 - ▶ [Plate] Centrifuge at 280 × g for 1 minute.
 - ▶ [Tube] Centrifuge briefly.
- 4 Add 125 µl SPB, and then mix thoroughly as follows.
 - ▶ [Plate] Shake at 1800 rpm for 1 minute.
 - ▶ [Tube] Pipette up and down.
- 5 Incubate at room temperature for 10 minutes.
- 6 Centrifuge as follows.
 - ▶ [Plate] Centrifuge at 280 × g for 1 minute.
 - ▶ [Tube] Centrifuge briefly.
- 7 Place on a magnetic stand and wait until the liquid is clear (2–5 minutes).
- 8 Remove and discard all supernatant.
- 9 Wash 2 times with 200 μl 80% EtOH.
- 10 Using a 20 µl pipette, remove residual 80% EtOH.
- 11 Air-dry on the magnetic stand for 10 minutes.

- 12 Add 7.7 µl EHB1, and then mix thoroughly as follows.
 - ▶ [Plate] Shake at 1800 rpm for 1 minute.
 - ▶ [Tube] Pipette up and down.
- 13 Remove from the magnetic stand.
- 14 Incubate at room temperature for 2 minutes.
- 15 Centrifuge as follows.
 - ▶ [Plate] Centrifuge at 280 × g for 1 minute.
 - ▶ [Tube] Centrifuge briefly.
- 16 Place on a magnetic stand and wait until the liquid is clear (~2 minutes).
- 17 Transfer 7.5 μ l supernatant to a new Hard-Shell PCR plate or to a new thin-wall PCR tube or 8-tube strip.
- 18 Add 2.5 µl EHB2, and then mix thoroughly as follows.
 - ▶ [Plate] Shake at 1800 rpm for 1 minute.
 - ▶ [Tube] Pipette up and down.
- 19 Centrifuge as follows.
 - ▶ [Plate] Centrifuge at 280 × g for 1 minute.
 - ▶ [Tube] Centrifuge briefly.
- 20 Place on the thermal cycler and run the TRE HYB program.

Capture Hybridized Probes

Preparation

- 1 [Plate] Preheat a microheating system with midi plate insert to 50°C.
- 2 [Tube] Preheat a heat block to 50°C.

- 1 Centrifuge at 280 × g for 1 minute.
- 2 Transfer all (~10 μl) to a new midi plate or to a new 1.5 ml microcentrifuge tube.
- 3 Add 250 µl SMB, and then mix thoroughly as follows.
 - ▶ [Plate] Shake at 1200 rpm for 5 minutes.
 - ▶ [Tube] Pipette up and down.
- 4 Incubate at room temperature for 25 minutes.
- 5 Centrifuge as follows.
 - ▶ [Plate] Centrifuge at 280 × g for 1 minute.
 - ▶ [Tube] Centrifuge briefly.
- 6 Place on a magnetic stand and wait until the liquid is clear (2–5 minutes).
- 7 Remove and discard all supernatant.
- 8 Remove from the magnetic stand.
- 9 Add 200 µl EEW, and then mix thoroughly as follows.
 - ▶ [Plate] Shake at 1800 rpm for 4 minutes. Pipette to resuspend the bead pellet further.
 - ▶ [Tube] Pipette up and down.
- 10 Incubate as follows.
 - ▶ [Plate] Place on the 50°C microheating system with the lid closed for 30 minutes.
 - ▶ [Tube] Place on the 50°C heat block for 30 minutes.
- 11 Immediately place on a magnetic stand and wait until the liquid is clear (~2 minutes).
- 12 Remove and discard all supernatant.
- 13 Remove from the magnetic stand.
- 14 Repeat steps 9–13 for a total of 2 washes.
- 15 Mix 28.5 μl EE1 and 1.5 μl HP3, and then vortex.
- 16 Add 23 µl elution premix, and then mix thoroughly as follows.
 - ▶ [Plate] Shake at 1800 rpm for 2 minutes.
 - ▶ [Tube] Pipette up and down.
- 17 Incubate at room temperature for 2 minutes.
- 18 Centrifuge as follows.
 - ▶ [Plate] Centrifuge at 280 × g for 1 minute.
 - ▶ [Tube] Centrifuge briefly.

- 19 Place on a magnetic stand and wait until the liquid is clear (~2 minutes).
- $20\,$ Transfer 21 μl supernatant to a new midi plate or to a new 1.5 ml microcentrifuge tube.
- 21 Add 4 µl ET2, and then mix thoroughly as follows.
 - ▶ [Plate] Shake at 1200 rpm for 1 minute.
 - ▶ [Tube] Pipette up and down.
- 22 Add 5 µl RSB, and then mix thoroughly as follows.
 - ▶ [Plate] Shake at 1200 rpm for 1 minute.
 - ▶ [Tube] Pipette up and down.
- 23 Centrifuge as follows.
 - ▶ [Plate] Centrifuge at 280 × g for 1 minute.
 - ▶ [Tube] Centrifuge briefly.

SAFE STOPPING POINT

If you are stopping, seal the plate or cap the tube and store at -25°C to -15°C for up to 7 days.

Perform Second Hybridization

- 1 Add the following reagents in the order listed.
 - ▶ BLR (10 µl)
 - CEX (10 μl)
- 2 Mix thoroughly as follows.
 - ▶ [Plate] Shake at 1200 rpm for 1 minute.
 - ▶ [Tube] Pipette up and down.
- 3 Centrifuge as follows.
 - ▶ [Plate] Centrifuge at 280 × g for 1 minute.
 - ▶ [Tube] Centrifuge briefly.
- 4 Add 125 µl SPB, and then mix thoroughly as follows.
 - ▶ [Plate] Shake at 1800 rpm for 1 minute.
 - ▶ [Tube] Pipette up and down.
- 5 Incubate at room temperature for 10 minutes.
- 6 Centrifuge as follows.
 - ▶ [Plate] Centrifuge at 280 × g for 1 minute.
 - ▶ [Tube] Centrifuge briefly.
- 7 Place on a magnetic stand and wait until the liquid is clear (2–5 minutes).
- 8 Remove and discard all supernatant.
- 9 Wash 2 times with 200 µl 80% EtOH.
- 10 Using a 20 µl pipette, remove residual 80% EtOH.
- 11 Air-dry on the magnetic stand for 10 minutes.
- 12 Add 7.7 µl EHB1, and then mix thoroughly as follows.
 - ▶ [Plate] Shake at 1800 rpm for 1 minute.
 - ▶ [Tube] Pipette up and down.
- 13 Remove from the magnetic stand.
- 14 Incubate at room temperature for 2 minutes.
- 15 Centrifuge as follows.
 - ▶ [Plate] Centrifuge at 280 × g for 1 minute.
 - ▶ [Tube] Centrifuge briefly.
- 16 Place on a magnetic stand and wait until the liquid is clear (~2 minutes).
- 17 Transfer 7.5 µl supernatant to a new Hard-Shell PCR plate or to a new 8-tube strip.
- 18 Add 2.5 µl EHB2, and then mix thoroughly as follows.
 - ▶ [Plate] Shake at 1800 rpm for 1 minute.
 - ▶ [Tube] Pipette up and down.
- 19 Centrifuge as follows.
 - ▶ [Plate] Centrifuge at 280 × g for 1 minute.
 - ▶ [Tube] Centrifuge briefly.

20 Place on the thermal cycler and run the TRE HYB program.

Perform Second Capture

Preparation

- 1 [Plate] Preheat a microheating system with midi plate insert to 50°C.
- 2 [Tube] Preheat a heat block to 50°C.

- 1 Centrifuge at 280 × g for 1 minute.
- 2 Transfer 10 µl supernatant to a new midi plate or to a new 1.5 ml microcentrifuge tube.
- 3 Add 250 µl SMB, and then mix thoroughly as follows.
 - ▶ [Plate] Shake at 1200 rpm for 5 minutes.
 - ▶ [Tube] Pipette up and down.
- 4 Incubate at room temperature for 25 minutes.
- 5 Centrifuge as follows.
 - ▶ [Plate] Centrifuge at 280 × g for 1 minute.
 - ▶ [Tube] Centrifuge briefly.
- 6 Place on a magnetic stand and wait until the liquid is clear (2–5 minutes).
- 7 Remove and discard all supernatant.
- 8 Remove from the magnetic stand.
- 9 Add 200 µl EEW, and then mix thoroughly as follows.
 - ▶ [Plate] Shake at 1800 rpm for 4 minutes. Pipette to resuspend the bead pellet further.
 - ▶ [Tube] Pipette up and down.
- 10 Incubate as follows.
 - ▶ [Plate] Place on the 50°C microheating system with the lid closed for 30 minutes.
 - ▶ [Tube] Place on the 50°C heat block for 30 minutes.
- 11 Immediately place on a magnetic stand and wait until the liquid is clear (~2 minutes).
- 12 Remove and discard all supernatant.
- 13 Remove from the magnetic stand.
- 14 Repeat steps 9–13 for a total of 2 washes.
- 15 Mix 28.5 μl EE1 and 1.5 μl HP3, and then vortex.
- 16 Add 23 µl elution premix, and then mix thoroughly as follows.
 - ▶ [Plate] Shake at 1800 rpm for 2 minutes.
 - ▶ [Tube] Pipette up and down.
- 17 Incubate at room temperature for 2 minutes.

- 18 Centrifuge as follows.
 - ▶ [Plate] Centrifuge at 280 × g for 1 minute.
 - ▶ [Tube] Centrifuge briefly.
- 19 Place on a magnetic stand and wait until the liquid is clear (~2 minutes).
- $20\,$ Transfer 21 μl supernatant to a new midi plate or to a new 1.5 ml microcentrifuge tube or 8-tube strip.
- 21 Add 4 µl ET2, and then mix thoroughly as follows.
 - ▶ [Plate] Shake at 1800 rpm for 1 minute.
 - ▶ [Tube] Pipette up and down.
- 22 Centrifuge as follows.
 - ▶ [Plate] Centrifuge at 280 × g for 1 minute.
 - ▶ [Tube] Centrifuge briefly.

Clean Up Captured Library

Procedure

- 1 Add 45 µl SPB, and then mix thoroughly as follows.
 - ▶ [Plate] Shake at 1800 rpm for 1 minute.
 - ▶ [Tube] Pipette up and down.
- 2 Incubate at room temperature for 5 minutes.
- 3 Centrifuge as follows.
 - ▶ [Plate] Centrifuge at 280 × g for 1 minute.
 - ▶ [Tube] Centrifuge briefly.
- 4 Place on a magnetic stand and wait until the liquid is clear (2–5 minutes).
- 5 Remove and discard all supernatant.
- 6 Wash 2 times with 200 μl 80% EtOH.
- 7 Use a 20 μl pipette to remove residual EtOH.
- 8 Air-dry on the magnetic stand until dry (~5 minutes).
- 9 Add 27.5 µl RSB, and then mix thoroughly as follows.
 - ▶ [Plate] Shake at 1800 rpm for 1 minute.
 - ▶ [Tube] Pipette up and down.
- 10 Remove from the magnetic stand.
- 11 Incubate at room temperature for 2 minutes.
- 12 Centrifuge as follows.
 - ▶ [Plate] Centrifuge at 280 × g for 1 minute.
 - ▶ [Tube] Centrifuge briefly.
- 13 Place on a magnetic stand and wait until the liquid is clear (2–5 minutes).
- 14 Transfer 25 µl supernatant to a new Hard-Shell PCR plate or to a new 8-tube strip.

SAFE STOPPING POINT

If you are stopping, seal the plate or cap the tube and store at -25°C to -15°C for up to 7 days.

Amplify Enriched Library

Preparation

- 1 Save the following AMP10 program on the thermal cycler:
 - ▶ Choose the preheat lid option and set to 100°C
 - ▶ 98°C for 30 seconds
 - ▶ 10 cycles of:
 - ▶ 98°C for 10 seconds
 - ▶ 60°C for 30 seconds
 - ▶ 72°C for 30 seconds
 - ▶ 72°C for 5 minutes
 - ▶ Hold at 10°C
 - **Each** well or tube contains 50 μl.

Procedure

- 1 Add 5 µl PPC.
- 2 Add 20 µl EAM, and then mix thoroughly as follows.
 - ▶ [Plate] Shake at 1200 rpm for 1 minute.
 - ▶ [Tube] Pipette up and down.
- 3 Centrifuge as follows.
 - ▶ [Plate] Centrifuge at 280 × g for 1 minute.
 - ▶ [Tube] Centrifuge briefly.
- 4 Place on the thermal cycler and run the AMP10 program.

SAFE STOPPING POINT

If you are stopping, seal the plate or cap the tube and store at 2°C to 8°C for up to 2 days. Alternatively, leave on the thermal cycler overnight.

Clean Up Amplified Enriched Library

Procedure

- 1 Centrifuge as follows.
 - ▶ [Plate] Centrifuge at 280 × g for 1 minute.
 - ▶ [Tube] Centrifuge briefly.
- 2 Transfer 50 µl to a new midi plate or to a new 1.5 ml microcentrifuge tube.
- 3 Add 50 µl SPB, and then mix thoroughly as follows.
 - ▶ [Plate] Shake at 1800 rpm for 1 minute.
 - ▶ [Tube] Pipette up and down.
- 4 Incubate at room temperature for 5 minutes.
- 5 Centrifuge as follows.
 - ▶ [Plate] Centrifuge at 280 × g for 1 minute.
 - ▶ [Tube] Centrifuge briefly.
- 6 Place on a magnetic stand and wait until the liquid is clear (2–5 minutes).
- 7 Remove and discard all supernatant.
- 8 Wash 2 times with 200 µl 80% EtOH.
- 9 Use a 20 µl pipette to remove residual EtOH.
- 10 Air-dry on the magnetic stand until dry (~5 minutes).
- 11 Add 32 µl RSB, and then mix thoroughly as follows.
 - ▶ [Plate] Shake at 1800 rpm for 1 minute.
 - ▶ [Tube] Pipette up and down.
- 12 Remove from the magnetic stand.
- 13 Incubate at room temperature for 2 minutes.
- 14 Centrifuge as follows.
 - ▶ [Plate] Centrifuge at 280 × g for 1 minute.
 - ▶ [Tube] Centrifuge briefly.
- 15 Place on a magnetic stand and wait until the liquid is clear (2–5 minutes).
- 16 Transfer 30 μ l supernatant to a new Hard-Shell PCR plate or to a new 1.5 ml microcentrifuge tube or 8-tube strip.

SAFE STOPPING POINT

If you are stopping, seal the plate or cap the tube and store at -25°C to -15°C for up to 7 days.

Validate Enriched Libraries

Quantify Libraries

1 Quantify the postenriched library using the Qubit dsDNA BR Assay Kit.

Assess Quality

- 1 If the library concentration is higher than the supported quantitative range for the High Sensitivity DNA chip, dilute the library 1:10 with RSB.
- 2 Run 1 µl of post enriched library using a High Sensitivity DNA chip.

Acronyms

| Acronym | Definition | |
|---------|-----------------------------------|--|
| BLR | Blocker | |
| CEX | Coding Exome Oligos | |
| EAM | Enrichment Amplification Mix | |
| EE1 | Enrichment Elution Buffer 1 | |
| EEW | Enhanced Enrichment Wash Solution | |
| EHB1 | Enrichment Hybridization Buffer 1 | |
| EHB2 | Enrichment Hybridization Buffer 2 | |
| ET2 | Elute Target Buffer 2 | |
| HP3 | 2N NaOH | |
| LAM | Library Amplification Mix | |
| PPC | PCR Primer Cocktail | |
| RSB | Resuspension Buffer | |
| SMB | Streptavidin Magnetic Beads | |
| SPB | Sample Purification Beads | |
| ST2 | Stop Tagment Buffer 2 | |
| TD | Tagment DNA Buffer | |
| TDE2 | Tagment DNA Enzyme 2 | |

Notes

Technical Assistance

For technical assistance, contact Illumina Technical Support.

Table 1 Illumina General Contact Information

| Website | www.illumina.com |
|---------|--------------------------|
| Email | techsupport@illumina.com |

Table 2 Illumina Customer Support Telephone Numbers

| Region | Contact Number | Region | Contact Number |
|---------------|----------------|-----------------|-----------------|
| North America | 1.800.809.4566 | Japan | 0800.111.5011 |
| Australia | 1.800.775.688 | Netherlands | 0800.0223859 |
| Austria | 0800.296575 | New Zealand | 0800.451.650 |
| Belgium | 0800.81102 | Norway | 800.16836 |
| China | 400.635.9898 | Singapore | 1.800.579.2745 |
| Denmark | 80882346 | Spain | 900.812168 |
| Finland | 0800.918363 | Sweden | 020790181 |
| France | 0800.911850 | Switzerland | 0800.563118 |
| Germany | 0800.180.8994 | Taiwan | 00806651752 |
| Hong Kong | 800960230 | United Kingdom | 0800.917.0041 |
| Ireland | 1.800.812949 | Other countries | +44.1799.534000 |
| Italy | 800.874909 | | |

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

Product documentation—Available for download in PDF from the Illumina website. Go to support.illumina.com, select a product, then select **Documentation & Literature**.



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