

Consumables and Equipment List

Consumables

Consumable	Supplier
10 µl pipette tips	General lab supplier
10 µl multichannel pipettes	General lab supplier
10 µl single channel pipettes	General lab supplier
1000 µl pipette tips	General lab supplier
1000 µl multichannel pipettes	General lab supplier
1000 µl single channel pipettes	General lab supplier
200 µl pipette tips	General lab supplier
200 µl multichannel pipettes	General lab supplier
200 µl single channel pipettes	General lab supplier
96-well storage plates, round well, 0.8 ml (MIDI plate)	Fisher Scientific, catalog # AB-0859
Illumina Purification Beads	Illumina, 1 x 100 ml, catalog # 20060057 Illumina, 4 x 100 ml, catalog # 20060058
Distilled water	General lab supplier
Ethanol 200 proof (absolute) for molecular biology (500 ml)	Sigma-Aldrich, product # E7023
Microseal 'A' film	Bio-Rad, catalog # MSA-5001
Microseal 'B' adhesive seals	Bio-Rad, catalog # MSB-1001
Microseal 'F' foil seals	Bio-Rad, catalog # MSF-1001
NaOH 1 N, pH > 12.5, molecular biology grade	General lab supplier
RNase/DNase-free multichannel reagent reservoirs, disposable	VWR, catalog # 89094-658
Ultrapure water	General lab supplier
Hard-Shell 96-well PCR plates	Bio-Rad, catalog # HSP-9601

Equipment

Equipment	Supplier
Basic lab equipment: safety glasses, lab coats, and powder-free protective gloves	
High-Speed microplate shaker	VWR, catalog # 13500-890 (110 V/120 V) VWR, catalog # 14216-214 (230 V)
Magnetic stand-96	Thermo Fisher Scientific, catalog # AM10027
Microplate centrifuge	General lab supplier
Vortexer	General lab supplier

Thermal Cyclers

Use the following recommended settings for selected thermal cycler models. Before performing library prep, validate any thermal cyclers not listed.

Thermal Cycler	Temp Mode	Lid Temp	Vessel Type
Bio-Rad DNA Engine Tetrad 2	Calculated	Heated, Constant at 100°C	Polypropylene plates and tubes
MJ Research DNA Engine Tetrad	Calculated	Heated	Plate
Eppendorf Mastercycler Pro S	Gradient S, Simulated Tube	Heated	Plate

Kit Contents

Completing the Nextera XT protocol requires library prep reagents and index adapters.

Component	Kit Options	Catalog #	
Library prep reagents	Nextera XT DNA Library Prep Kit (24 Samples)	FC-131-1024	
	Nextera XT DNA Library Prep Kit (96 Samples)	FC-131-1096	
Index adapters	IDT for Illumina Nextera UD Indexes Set A (96 Indexes, 96 Samples)	20027213	
	IDT for Illumina Nextera UD Indexes Set B (96 Indexes, 96 Samples)	20027215	
	IDT for Illumina Nextera UD Indexes Set C (96 Indexes, 96 Samples)	20027215	
	IDT for Illumina Nextera UD Indexes Set D (96 Indexes, 96 Samples)	20027216	
	Nextera XT Index Kit v2 Set A (96 Indexes, 384 Samples)	FC-131-2001	
	Nextera XT Index Kit v2 Set B (96 Indexes, 384 Samples)	FC-131-2002	
	Nextera XT Index Kit v2 Set C (96 Indexes, 384 Samples)	FC-131-2003	
	Nextera XT Index Kit v2 Set D (96 Indexes, 384 Samples)	FC-131-2004	
	[Optional] Additional Accessories for Nextera XT Index Kit	Bag of 48 Index Adapter replacement caps, orange	15026585
		Bag of 32 Index Adapter replacement caps, white	15026586
TruSeq Index Plate Fixture Kit		FC-130-1005	

Nextera XT Library Prep Contents

Nextera XT Sample Prep Kit– Box 1 of 2

These reagents are shipped at -25°C to -15°C. Promptly store reagents at the indicated tube temperature to ensure proper performance.

Tube Quantity		Acronym	Reagent Name	Storage Temperature
24 Samples	96 Samples			
1	1	ATM	Amplicon Tagment Mix	-25°C to -15°C
1	2	TD	Tagment DNA Buffer	-25°C to -15°C
1	1	HT1	Hybridization Buffer	-25°C to -15°C
1	1	NPM	Nextera PCR Master Mix	-25°C to -15°C
1	4	RSB	Resuspension Buffer	-25°C to -15°C
1	1	LNA1	Library Normalization Additives 1	-25°C to -15°C
1	2	LNW1	Library Normalization Wash 1	2°C to 8°C

Nextera XT Sample Prep Kit– Box 2 of 2

These reagents are shipped at -25°C to -15°C. Promptly store reagents at the indicated tube temperature to ensure proper performance.

Tube Quantity		Acronym	Reagent Name	Storage Temperature
24 Samples	96 Samples			
1	1	NT	Neutralize Tagment Buffer	Room temperature
1	1	LNB1	Library Normalization Beads 1	2°C to 8°C
1	1	LNS1	Library Normalization Storage Buffer 1	Room temperature

Index Kit Contents

For index adapter sequences, see *Illumina Adapter Sequences (document # 1000000002694)*.

Nextera XT Index Kit v2 (96 indexes, 384 samples)

Index Adapters, Store at -25°C to -15°C

Set	Quantity	Description
A	8 tubes	Index Primers, S502, S503, S505–S508, S510, and S511
	12 tubes	Index Primers, N701–N707, N710–N712, N714, and N715
B	8 tubes	Index Adapters: S502, S503, S505–S508, S510, and S511
	12 tubes	Index Adapters: N716, N718–N724, and N726–N729
C	8 tubes	Index Adapters: S513, S515–S518, and S520–S522
	12 tubes	Index Adapters: N701–N707, N710–N712, N714, and N715
D	8 tubes	Index Adapters: S513, S515–S518, and S520–S522
	12 tubes	Index Adapters: N716, N718–N724, and N726–N729

Index Adapter Replacement Caps, Store at 15°C to 30°C

Quantity	Description
1 bag	i7 Index Tube Caps, Orange
1 bag	i5 Index Tube Caps, White

Nextera XT Index Kit (24 Indexes, 96 Samples)

Index Adapters, Store at -25°C to -15°C

Quantity	Description
4 tubes	Index Adapters: S502–S504 and S517
6 tubes	Index Adapters: N701–N706

Index Adapter Replacement Caps, Store at 15°C to 30°C

Quantity	Description
1 bag	i7 Index Tube Caps, Orange
1 bag	i5 Index Tube Caps, White

IDT for Illumina Nextera DNA UD Indexes (96 Indexes, 96 Samples) Plate Format, Store at -25°C to -15°C

Quantity	Description
1	96 Dual Adapter Index Plate

TruSeq Index Plate Fixture Kit, Store at Room Temperature (Optional)

Each TruSeq Index Plate Fixture Kit contains two fixtures to help arrange index primers before dispensing to a 96-well plate during library amplification. The fixture pairs with both the 24-sample kit and 96-sample kit.

Quantity	Description
2	TruSeq Index Plate Fixture

Signatures

FAS/FSE	Customer
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