

Product selection guide



	Select targets	Construct library	Prepare template	Run sequence	Analyze data
Application	Products				
Cancer genomics research	Variant detection ● For DNA preparation from FFPE samples: Ion AmpliSeq™ Direct FFPE DNA Kit (8 preps) Cat. No. A31133 Ion AmpliSeq Direct FFPE DNA Kit (96 preps) Cat. No. A31136 Ion panels Ion AmpliSeq™ Cancer Hotspot Panel v2 Cat. No. 4475346 Ion AmpliSeq™ Comprehensive Cancer Panel Cat. No. 4477685 Community panels (order at ampliseq.com) Ion AmpliSeq™ BRCA1 and BRCA2 Research Panel Ion AmpliSeq™ Colon and Lung Cancer Research Panel v2 Ion AmpliSeq™ TP53 Research Panel Ion AmpliSeq™ AML Research Panel Ion AmpliSeq™ Custom DNA Panels (order at ampliseq.com)	Ion AmpliSeq™ Kit for Chef DL8, 32 rxns Cat. No. A29024 (optional) Ion AmpliSeq™ Sample ID Panel Cat. No. 4479790 Or Ion AmpliSeq™ Library Kit 2.0 (96 LV format) Cat. No. 4480441 Ion Xpress™ Barcode Adapters 1-96 Kit Cat. No. 4474517 (optional) Ion Library™ Equalizer Kit Cat. No. 4482298 Ion AmpliSeq Sample ID Panel Cat. No. 4479790	Ion Chef™ System Cat. No. 4484177 And Ion PGM™ Hi-Q™ View Chef Kit Cat. No. A29902 (includes template preparation and sequencing reagents) Or Ion OneTouch™ 2 System Cat. No. 4474779 AND Ion PGM™ Hi-Q™ View OT2 Kit Cat. No. A29900 Or Ion OneTouch™ 2 enrichment system (ES) And Ion PGM Template IA 500 Kit Cat. No. A24622 And Ion PGM™ Enrichment Beads Cat. No. 4478525	Ion PGM™ System Cat. No. 4462921 And For use with the Ion PGM™ Hi-Q™ View Chef Kit: Ion PGM™ Hi-Q™ View Chef 400 Kit Cat. No. A30798 (supplemental kit for 400-base read sequencing) And Any of the following: Ion 314™ Chip Kit v2 BC Cat. No. 4488144 Ion 316™ Chip Kit v2 BC Cat. No. 4488149 Ion 318™ Chip Kit v2 BC Cat. No. 4488150 Or For use with the Ion PGM Hi-Q View OT2 Kit or the Ion PGM Template IA 500 Kit: Ion PGM™ Hi-Q™ View Sequencing Kit Cat. No. A30044 And Any of the following: Ion 314 Chip Kit v2 BC Cat. No. 4488144 Ion 316 Chip Kit v2 BC Cat. No. 4488149 Ion 318 Chip Kit v2 BC Cat. No. 4488150	Torrent Suite™ Software • Torrent Variant Caller plug-in And Ion Reporter™ Software
	Quantitative gene expression ●	Ion AmpliSeq™ RNA Cancer Research Panel Cat. No. 4482572 Ion AmpliSeq™ RNA Apoptosis Panel Cat. No. 4482571 Ion AmpliSeq™ RNA Fusion Lung Cancer Research Panel (order at ampliseq.com) Ion AmpliSeq™ Custom RNA Panels (order at ampliseq.com)	Ion AmpliSeq™ RNA Library Kit Cat. No. 4482340 Ion Xpress Barcode Adapters 1-96 Kit Cat. No. 4474517		
Inherited disease research	Variant detection ● Ion panels Ion AmpliSeq™ Inherited Disease Panel Cat. No. 4477686 Community panels (order at ampliseq.com) Ion AmpliSeq™ CFTR Research Panel† Ion AmpliSeq™ Hearing Loss Research Panel v1* Ion AmpliSeq™ Dementia Research Gene Panel* Ion AmpliSeq Custom DNA Panels (order at ampliseq.com)	Ion AmpliSeq Kit for Chef DL8, 32 rxns Cat. No. A29024 (optional) Ion AmpliSeq Sample ID Panel Cat. No. 4479790 Or Ion AmpliSeq Library Kit 2.0 (96 LV format) Cat. No. 4480441 Ion Xpress Barcode Adapters 1-96 Kit Cat. No. 4474517 (optional) Ion Library Equalizer Kit Cat. No. 4482298 Ion AmpliSeq Sample ID Panel Cat. No. 4479790			Torrent Suite Software • Torrent Variant Caller plug-in And Ion Reporter Software
	Quantitative gene expression ●	Ion AmpliSeq Custom RNA Panels (order at ampliseq.com)	Ion AmpliSeq RNA Library Kit Cat. No. 4482340 Ion Xpress Barcode Adapters 1-96 Kit Cat. No. 4474517		Torrent Suite Software • Coverage Analysis plug-in And Partek Flow Software
	Small RNA analysis ●	Invitrogen™ mirVana™ miRNA Isolation Kit Cat. No. AM1560	Ion Total RNA-Seq v2 Cat. No. 4475936 Ion Xpress™ RNA-Seq Barcode 1-16 Kit Cat. No. 4475485		

* Designed and verified with leading researchers.

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Application		Products																	
Preimplantation aneuploidy analysis	Aneuploidy detection	<p>Ion SingleSeq™ Kit included in any of the following:</p> <ul style="list-style-type: none"> • Ion ReproSeq™ PGS 314 View Kit, with chips Cat. No. A32243 • Ion ReproSeq™ PGS 316 View Kit, with chips Cat. No. A32249 • Ion ReproSeq™ PGS 318 View Kit, with chips Cat. No. A32250 • Ion ReproSeq™ PGS 314 View Kit, without chips Cat. No. A32251 • Ion ReproSeq™ PGS 316 View Kit, without chips Cat. No. A32252 • Ion ReproSeq™ PGS 318 View Kit, without chips Cat. No. A32253 		<p>Ion PGM Template IA 500 Kit included in any of the following:</p> <ul style="list-style-type: none"> • Ion ReproSeq PGS 314 View Kit, with chips Cat. No. A32243 • Ion ReproSeq PGS 316 View Kit, with chips Cat. No. A32249 • Ion ReproSeq PGS 318 View Kit, with chips Cat. No. A32250 • Ion ReproSeq PGS 314 View Kit, without chips Cat. No. A32251 • Ion ReproSeq PGS 316 View Kit, without chips Cat. No. A32252 • Ion ReproSeq PGS 318 View Kit, without chips Cat. No. A32253 <p>For template enrichment:</p> <p>Ion PGM Enrichment Beads Cat. No. 4478525</p> <p>And</p> <p>Ion OneTouch 2 ES</p>	<p>Ion PGM System Cat. No. 4462921</p> <p>And</p> <p>Ion PGM Hi-Q View Sequencing Kit included in any of the following:</p> <ul style="list-style-type: none"> • Ion ReproSeq PGS 314 View Kit, with chips Cat. No. A32243 • Ion ReproSeq PGS 316 View Kit, with chips Cat. No. A32249 • Ion ReproSeq PGS 318 View Kit, with chips Cat. No. A32250 • Ion ReproSeq PGS 314 View Kit, without chips Cat. No. A32251 • Ion ReproSeq PGS 316 View Kit, without chips Cat. No. A32252 • Ion ReproSeq PGS 318 View Kit, without chips Cat. No. A32253 	<p>Torrent Suite Software</p> <p>And</p> <p>Ion Reporter Software</p> <ul style="list-style-type: none"> • Aneuploidy workflow 													
	Plant and animal genomics	Variant detection	<p>Design custom panels for any reference genome using the Ion AmpliSeq™ Designer at ampliseq.com. Upload a custom reference or use one of the preloaded reference genomes:</p> <table border="0"> <tr> <td>Mouse</td> <td>Sheep</td> <td>Rice</td> </tr> <tr> <td>Chicken</td> <td>Chinese hamster</td> <td>Soybean</td> </tr> <tr> <td>Cow</td> <td>Dog</td> <td>Tomato</td> </tr> <tr> <td>Pig</td> <td>Maize</td> <td></td> </tr> </table>	Mouse	Sheep	Rice	Chicken	Chinese hamster	Soybean	Cow	Dog	Tomato	Pig	Maize		<p>Ion AmpliSeq Kit for Chef DL8, 32 rxns Cat. No. A29024</p> <p>Or</p> <p>Ion AmpliSeq Library Kit 2.0 (96 LV format) Cat. No. 4480441</p> <p>Ion Xpress Barcode Adapters 1-96 Kit Cat. No. 4474517 (optional)</p> <p>Ion Library Equalizer Kit Cat. No. 4482298</p>	<p>Ion Chef System Cat. No. 4484177</p> <p>And</p> <p>Ion PGM Hi-Q View Chef Kit Cat. No. A29902 (includes template preparation and sequencing reagents)</p> <p>Or</p> <p>Ion OneTouch 2 System Cat. No. 4474779</p> <p>And</p> <p>Ion PGM Hi-Q View OT2 Kit Cat. No. A29900</p> <p>Or</p> <p>Ion OneTouch 2 ES</p> <p>And</p> <p>Ion PGM Template IA 500 Kit Cat. No. A24622</p> <p>And</p> <p>Ion PGM™ Enrichment Beads Cat. No. 4478525</p>	<p>Ion PGM System Cat. No. 4462921</p> <p>And</p> <p>For use with the Ion PGM Hi-Q View Chef Kit:</p> <p>Ion PGM Hi-Q View Chef 400BP Kit Cat. No. A30798 (supplemental kit for 400-base read sequencing)</p> <p>And</p> <p>Any of the following:</p> <ul style="list-style-type: none"> Ion 314 Chip Kit v2 BC Cat. No. 4488144 Ion 316 Chip Kit v2 BC Cat. No. 4488149 Ion 318 Chip Kit v2 BC Cat. No. 4488150 <p>Or</p> <p>For use with the Ion PGM Hi-Q View OT2 Kit or the Ion PGM Template IA 500 Kit:</p> <p>Ion PGM Hi-Q View Sequencing Kit Cat. No. A30044</p> <p>And</p> <p>Any of the following:</p> <ul style="list-style-type: none"> Ion 314 Chip Kit v2 BC Cat. No. 4488144 Ion 316 Chip Kit v2 BC Cat. No. 4488149 Ion 318 Chip Kit v2 BC Cat. No. 4488150 	<p>Torrent Suite Software</p> <ul style="list-style-type: none"> • Torrent Variant Caller plug-in
		Mouse	Sheep	Rice															
Chicken	Chinese hamster	Soybean																	
Cow	Dog	Tomato																	
Pig	Maize																		
Microbial genomics	Discovery and characterization		<p>Ion Xpress™ Plus Fragment Library Kit Cat. No. 4471269</p> <p>Or</p> <p>Thermo Scientific™ MuSeek Library Preparation Kit, Ion Torrent™ system-compatible Cat. No. K1331 (optional)</p> <p>Ion Xpress Barcode Adapters 1-96 Kit Cat. No. 4474517</p>			<p>Torrent Suite Software</p> <ul style="list-style-type: none"> • Assembler plug-in • Assembler SPAdes v3.1 plug-in <p>Ion Torrent™ DNASTAR™ Lasergene™ Genomics Suite</p>													
	Metagenomics research	Ion 16S™ Metagenomics Kit Cat. No. A26216	<p>Ion Xpress Plus Fragment Library Kit Cat. No. 4471269</p> <p>Or</p> <p>MuSeek Library Preparation Kit, Ion Torrent™ system-compatible Cat. No. K1331</p> <p>Ion Xpress Barcode Adapters 1-96 Kit Cat. No. 4474517</p> <p>For use with Ion 16S Metagenomics Kit:</p> <p>Ion Universal Library Quantitation Kit Cat. No. A26217</p>			<p>Torrent Suite Software</p> <p>And</p> <p>Ion Reporter Software</p> <ul style="list-style-type: none"> • 16S metagenomics analysis 													
	Bacterial typing research					<p>Torrent Suite Software</p> <ul style="list-style-type: none"> • Pathogen Analyzer Research plug-in <p>Ion Torrent™ Ridom™ SeqSphere+ Software</p>													