

Access Array Target-Specific Primers

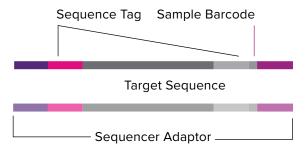
Custom primer design for high-throughput amplicon resequencing

- Multiplex up to 480 amplicons per sample
- Common Sequence (CS) tagged forward and reverse targetspecific primers
- Compatible with Illumina GAII, MiSeq and HiSeq, Ion Torrent PGM, and Roche 454 sequencing platforms
- Amplicon and primer sequences are provided
- Sufficient for 100 Fluidigm 48.48 Access Array IFCs

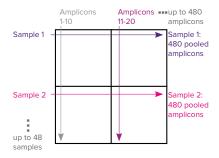
MAXIMIZE SEQUENCING YIELD

Access Array Target-Specific Primers are custom designed to your regions of interest with the necessary sequence tags for fast and easy incorporation of PCR based sample barcodes and next-generation sequencing adaptors. Access Array amplicon products bypass expensive and time consuming traditional library preparation. When used with the Access Array System, they allow for the preparation of up to 480 amplicons across 48 samples in a single Access Array Integrated Fluidic Circuit (IFC). When used with Fluidigm Barcode Libraries, 96 to 384 unique samples can be run per sequencing run, maximizing the utility of each run. Depending on the system, you can choose between single-read, pairedend, or bidirectional protocols.

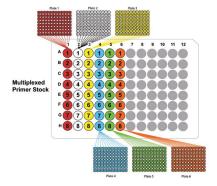
Simply provide Fluidigm with your genes or genomic regions of interest from the human genome and we will design and deliver primers for use with the Access Array System.



Access Array™ target-specific primers sequencer-ready amplicons containing sequencer tags, adaptors and sample barcodes.



Each box represents a reaction chamber in the 48.48 Access Array IFC, and allows for 1 to 10X Muliplex PCR per chamber.



The Access Array Target-Specific primers are provided in single-plex, which allow flexibility in changing or adding targets, and combined into multiplexed primer stock.

PLATFORM

	Amplicon Length (bp)	# of Unique Barcodes	Multiplex
Illumina GAII, HiSeq and MiSeq Sequencers	200 bp	384	480
Ion Torrent PGM™ Sequencer	200 bp	96	480
Roche 454 GS and FLX GS Junior Sequencers	400 bp	96	48

TABLE 1: NUMBER OF UNIQUELY BARCODED SAMPLES PER RUN(S)

# of Access Array Run(s)	# of Uniquely Barcoded Samples (up to 384 unique barcodes)	Max # of Unique Amplicons per Sequencing Lane (up to 480 amplicons/sampl
1	48	23,040
2	96	46,080
3	144	69,120
4	192	92,160
5	240	115,200
6	288	138,240
7	336	161,280
8	384	184,320

SPECIFICATIONS FOR UNIPLEX

wet tested by gel electrophoresis

% amplification success (for ≤65% GC content)	≥95%
Input DNA requirement	50 ng
Number of amplicons per sample	48
Amplicon size	100-200 bp
Turnaround time	within 4 to 6 weeks

SPECIFICATIONS FOR MULTIPLEX

% mapped to genome (to sequencer specifications)	>85%
% mapped to target (of mapped to genome)	>90%
% coverage uniformity within 5-fold (30-70% GC content)	>80%
Input DNA requirement	50 ng
Number of amplicons per sample	48-480
Amplicon size	100-200 bp
Turnaround time	within 3 to 4 weeks

FLUIDIGM SOLUTION FOR NEXT-GENERATION SEQUENCING

Access Array
 Target-Specific Primers

Custom primers for the Access Array System

Access Array IFCs
 IFCs (Integrated Fluidic Circuits)
 for easy sample prep
 for targeted resequencing

IFC Controller AX
 IFC Controller for priming and

loading the Access Array IFCs

FC1 Cycler

FC1 Cycler for performing PCR in the Access Array IFCs

ORDERING INFORMATION

Product	P/N
Access Array Target-Specific Primers (wet tested)	ASY-AA
Access Array Multiplex Target-Specific Primers (non-wet tested)	ASY-AAX
Access Array Barcode Library for Illumina Sequencers - 384 (Bidirectional)	100-3771
Access Array Barcode Library for Illumina Sequencers - 384 (Single direction)	100-4876

Corporate headquarters

7000 Shoreline Court, Suite 100 South San Francisco, CA 94080 USA Toll-free: 866 359 4354 | Fax: 650 871 7152 fluidigm.com

Sales

North America | +1 650 266 6170 | info-us@fluidigm.com Europe/EMEA | +33 (0)1 60 92 42 40 | info-europe@fluidigm.com Japan | +81 (0)3 3662 2150 | info-japan@fluidigm.com China (excluding Hong Kong) | +86 (0)21 3255 8368 | info-china@fluidigm.com

Asia | +1 650 266 6000 | info-asia@fluidigm.com

Latin America | +1 650 266 6000 | info-latinamerica@fluidigm.com

©2014 Fluidigm Corporation. All rights reserved. Fluidigm, the Fluidigm logo, Access Array and FC1 are trademarks or registered trademarks of Fluidigm Corporation in the United States and/or other countries. All other trademarks are the property of their respective owners.