

Fluidics Scripts

Fluidics Scripts are protocols, or methods, used by GeneChip® Fluidics Stations for the washing and staining of GeneChip® arrays. The scripts are specific for various applications, array formats, reagents used, and models of the Fluidics Station.

For 11µm feature size arrays using GeneChip IVT Labeling Kit						
		Array Format and Array Types				
		49	64	100	169	400
		Human Genome U133 Plus 2.0	Rat Genome 230 2.0	Human Genome U133A 2.0		
		Mouse Genome 430 2.0		Mouse Genome 430A 2.0		
		<i>Xenopus tropicalis</i>	Canine 2.0			
				Drosophila Genome 2.0		
Hybridization, Wash and Stain Buffers	Fluidics Stations	Fluidics Scripts to use				
GeneChip HWS Kit	FS400	EukGE-WS2v5	EukGE-WS2v5	Midi_euk2v3	Mini_euk2v3	Micro_1v1
	FS450/250	FS450_0001	FS450_0001	FS450_0002	FS450_0003	FS450_0003
User Prepared Solutions	FS400	EukGE-WS2v5	EukGE-WS2v5	Midi_euk2v3	Mini_euk2v3	Micro_1v1
	FS450/250	EukGE-WS2v5_450	EukGE-WS2v5_450	Midi_euk2v3_450	Mini_euk2v3_450	Micro_1v1_450
For 11µm feature size arrays using all other labeling kits						
		Array Format and Array Types				
		49	64	100	169	400
		Human Genome U133 Plus 2.0	Rat Genome 230 2.0	Human Genome U133A 2.0		
		Mouse Genome 430 2.0		Mouse Genome 430A 2.0		

		<i>Xenopus tropicalis</i>	Canine 2.0			
				Drosophila Genome 2.0		
Hybridization, Wash and Stain Buffers	Fluidics Stations	Fluidics Scripts to Use				
GeneChip HWS Kit	FS400	EukGE-WS2v4	EukGE-WS2v4	Midi_euk2v3	Mini_euk2v3	Micro_1v1
	FS450/250	FS450_0004	FS450_0004	FS450_0002	FS450_0003	FS450_0003
User Prepared Solutions	FS400	EukGE-WS2v4	EukGE-WS2v4	Midi_euk2v3	Mini_euk2v3	Micro_1v1
	FS450/250	EukGE-WS2v4_450	EukGE-WS2v4_450	Midi_euk2v3_450	Mini_euk2v3_450	Micro_1v1_450

Table 2. Fluidics Scripts for greater than or equal to 18 - μm feature size eukaryotic expression 3'-arrays
(listed by array format and labeling protocol)

For greater than or equal to 18μm feature size arrays, using GeneChip IVT Labeling Kit and all other labeling kits					
	Array Format and Array Types				
	49	64	100	169	400
Human Genome U133 Set		Rat Expression Set 230	Human Genome Focus	Rat Neurobiology U34	
Human Genome U95 Set				Rat Toxicology U34	
Mouse Expression Set 430					
Murine Genome U74v2 Set					

		Rat Genome U34 Set				
		Arabidopsis ATH1				
		Barley				
		<i>C.elegans</i>				
		Drosophila				
		Plasmodium / Anopheles				
		Test 3 Format 1	Test 3 Format 2	Test 3 Format 3		Test 3
		<i>Xenopus laevis</i>				
		Yeast Genome S98				
		Zebrafish				
Hybridization, Wash and Stain Buffers	Fluidics Stations	Fluidics Scripts to Use				
GeneChip HWS Kit	FS400	EukGE-WS2v4	EukGE-WS2v4	Midi_euk2v3	Mini_euk2v3	Micro_1v1
	FS450/250	FS450_0004	FS450_0004	FS450_0002	FS450_0003	FS450_0003
User Prepared Solutions	FS400	EukGE-WS2v4	EukGE-WS2v4	Midi_euk2v3	Mini_euk2v3	Micro_1v1
	FS450/250	EukGE-WS2v4_450	EukGE-WS2v4_450	Midi_euk2v3_450	Mini_euk2v3_450	Micro_1v1_450

Table 3. Fluidics Scripts for Gene, Exon and Tiling Arrays

Array Format and Array Types			
<i>Array Name</i>	Format	Fluidics Script for Fluidics Station 450	Fluidics Script for Fluidics Station 400
Human Exon 1.0 ST Array	49	FS450_0001	EukGE-WS2v5
Mouse Exon 1.0 ST Array	49	FS450_0001	EukGE-WS2v5
Rat Exon 1.0 ST Array	49	FS450_0001	EukGE-WS2v5

Human Gene 1.0 ST Array	169	FS450_0007	Not Supported
Mouse Gene 1.0 ST Array	169	FS450_0007	Not Supported
Rat Gene 1.0 ST Array	169	FS450_0007	Not Supported
Human Tiling 1.0R Array Set	49	FS450_0001	EukGE-WS2v5
Mouse Tiling 1.1R Array Set	49	FS450_0001	EukGE-WS2v5

Table 4. Fluidics Scripts for Prokaryotic Expression Arrays

		Array Format and Array Types		
		49	100	169
		<i>E.coli</i> Antisense Genome	<i>P.aeruginosa</i> Genome	<i>E.coli</i> 2.0
Hybridization, Wash and Stain Buffers	Fluidics Stations	Fluidics Scripts to use		
GeneChip HWS Kit	FS400	ProkGE-WS2v3	Modified FlexMidi_euk2v3	Mini_prok2v1
	FS450/250	FS450_0005	Modified Flex FS450_0002	FS450_0006
User Prepared Solutions	FS400	ProkGE-WS2v3	Modified FlexMidi_euk2v3	Mini_prok2v1
	FS450/250	ProkGE-WS2v3_450	Modified FlexMidi_euk2v3_450	Mini_prok2v1_450

Table 5. Fluidics Scripts for DNA Analysis Arrays on Fluidics Station 450/250

Array Format and Array Types				
Array Name	49	64	100	169
Mapping 10K Array	Mapping10Kv1_450	N/A	N/A	N/A
Mapping 10K 2.0 Array	N/A	N/A	N/A	Mini_Mapping10Kv1_450
Mapping 50K Arrays	Mapping100Kv1_450	N/A	N/A	N/A
Mapping 250K Arrays	Mapping500K1v2_450	N/A	N/A	N/A
Genome-Wide Human SNP Array 5.0		GenomeWideSNP5v1_450		

Genome-Wide Human SNP Array 6.0	GenomeWideSNP6_450			
CustomSeq® Arrays	DNAarray_WS5_450	N/A	Midi_DNAarray_WS5_450	Mini_DNAarray_WS5_450
GenFlex®	N/A	N/A	N/A	GenFlexv3_450 or GenFlex_Sv3_450

Table 6. Fluidics Scripts for DNA Analysis Arrays on Fluidics Station 400

Array Format and Array Types				
<i>Array Name</i>	49	64	100	169
Mapping 10K Array	DNAarray_WS5	N/A	N/A	N/A
Mapping 10K 2.0 Array	N/A	N/A	N/A	Mini_Mapping10Kv1
Mapping 50K Arrays	Mapping100Kv1	N/A	N/A	N/A
CustomSeq® Arrays	DNAarray_WS5	N/A	Midi_DNAarray_WS5	Mini_DNAarray_WS5
GenFlex®	N/A	N/A	N/A	GenFlexv3 or GenFlex_Sv3