Genomics

PCR Setup

The Lynx 96VVP Technology in combination with FlexTrough allows the independent tip dispensing allowing high speed PCR Setup.

PCR Setup

Real time PCR is a widely used tool for gene expression, mutational analysis and pathogen detection. It allows for detection of PCR products during early amplification stages leading to quantitative measurement, as opposed to traditional end-point PCR.

Thus, real time quantitative PCR (qPCR) is frequently used to precisely measure DNA content in a variety of human samples. Manual PCR setup is both tedious and time consuming in that transfer steps have the potential to introduce contamination.

Use of automated liquid handling systems to automate PCR processes can significantly improve throughput, reduce user error and maintain quality.

- Multiplexed genotyping sssays
- Taqman-based PCR genotyping assays
- Real-time PCR analysis
- SNP analysis
- Cycle sequencing reaction setup
- DNA sequence plate setup for loading onto capillary electrophoresis (CE) sequencers.

FlexTrough Makes It Faster

The idea of FlexTrough is similar to standard qPCR setup in that a matrix is set up in both X and Y on a microplate. Traditionally, this is done with a 1, 2, 4 or 8 tip machine which uses 1 tip at a time to perform this combinatorial setup. FlexTrough allows 96 tips to perfrom the dispensing thus simplifying programming and increasing throughput.



	Gene # 1								ana t	10	Endogenous		
	Gene# I				Gene # 2			Gene # 3			control gene		
	All	1.	2	3	4	5	6	7	8	9	10	11	12
		1T Gene # 1 Unknown	1T Gene # 1 Unknown	1T Gene # 1 Unknown	1T Gene # 2 Unknown	1T Gene # 2 Unknown	1T Gene # 2 Unknown	ST Gene # 3 Unknown	1T Gene # 3 Unknown	1T Gene # 3 Unknown	STEC #1 Unknown	1TEC#1 Unknown	1T EC #1
1T	A	REF	REF	REF	REF ()	REF	REF C	er /	REF	REF	KEX	REF HEX	REF
1N	В	1N Gene # 1 Unknown	1N Gene # 1 Unknown	1N Gene # 1 Unknown	1N Gene # 2 Unknown	1N Gene # 2 Unknown	1N Gene # 2 Unknown	IN Gene # 3 Unknown	1N Gene # 3 Unknown	1N Gene # 3 Unknown	1N EC #1 Unknown	1N EC #1 Unknown	1N EC #1 Unknown
		REF	REF FAM	REF FAM	REF	REF	REF	EF AM	REF	REF FAM.	MEX.	REF	REF
 2T	С	2T Gene # 1 Unknown	2T Gene # 1 Unknown	2T Gene # 1 Unknown	2T Gene # 2 Unknown	2T Gene # 2 Unknown	2T Gene # 2 Unknown	21 Gene #3 Unknown	2T Gene # 3 Unknown	2T Gene # 3 Unknown	2T EC #1 Unknown	2T EC #1 Unknown	2T EC #1
		REF FAM	REF FAM	REF FAM	REF	REF FAM	REF FAM	EF AM	REF	REF FAM	NEX .	REF HEX	REF
2N	D	2N Gene # 1 Ursknown	2N Gene # 1 Unknown	2N Gene # 1 Unknown	2N Gene # 2 Unknown	2N Gene # 2 Unknown	2N Gene # 2 Unknown	2N Gene # 3 Unknown	2N Gene # 3 Unknown	2N Gene # 3 Unknown	2N EC #1 Unknown	2N EC #1 Unknown	2N EC #1 Unknown
		REF	REF 4	REF	REF 1 2	REF 2	REF	er 2 ()	REF	REF.	MEX STEP	REF	REF HEX
<u>—</u> .		3T Gene # 1 Unknown	3T Gene # 1 Unknown	3T Gene # 1 Unknown	37 Gene # 2 Unknown	31 Gene # 2 Unknown	37 Gene # 2 Unknown	31 Gene # 3 Unknown	3T Gene # 3 Unknown	31 Gene # 3 Unknown	3) ÉC #1 Unknown	STEC #1 Unknown	ST ÉC #1
	E	REF FAM	REF 5	REF	REF	REF 3	REF	er 1	REF	REF FAM	HEX .	REF	REF HEX
3N	F	3N Gene # 1 Unknown	3N Gene # 1 Unknown	3N Gene # 1 Unknown	3N Gene # 2 Unknown	3N Gene # 2 Unknown	3N Gene # 2 Unknown	3N Gene # 3 Unknown	3N Gene # 3 Unknown	3N Gene # 3 Unknown	3N EC #1 Unknown	3N EC #1 Unknown	3N EC #1
		REF	REF	REF	REF 4	REF	REF	u 22	REF	REF	REF NEX	REF	REF HEX
Controls			Lic General	(a)C General	(A)C Geneti2	OK Genetz FAM Pos	(a)C Genetiz	old General		(d)C General	TO CETCE!	INC ECIT	(6)C ECF HEX Pos
	G	REF	REF	REF FAM	REF	REF 5	REF 5	#23	REF	REF FAM	EX.	REF NEX	REF HEX
			NTC Gene#1		NTC Gene#2		NTC General	ITC Gene#3			NTC EC #1	NTC EC #1	NTC EC #
	Н	REF	REF 8	REF	REF 6	REF 16	REF	The second second	REF		HEX.	REF	REF



