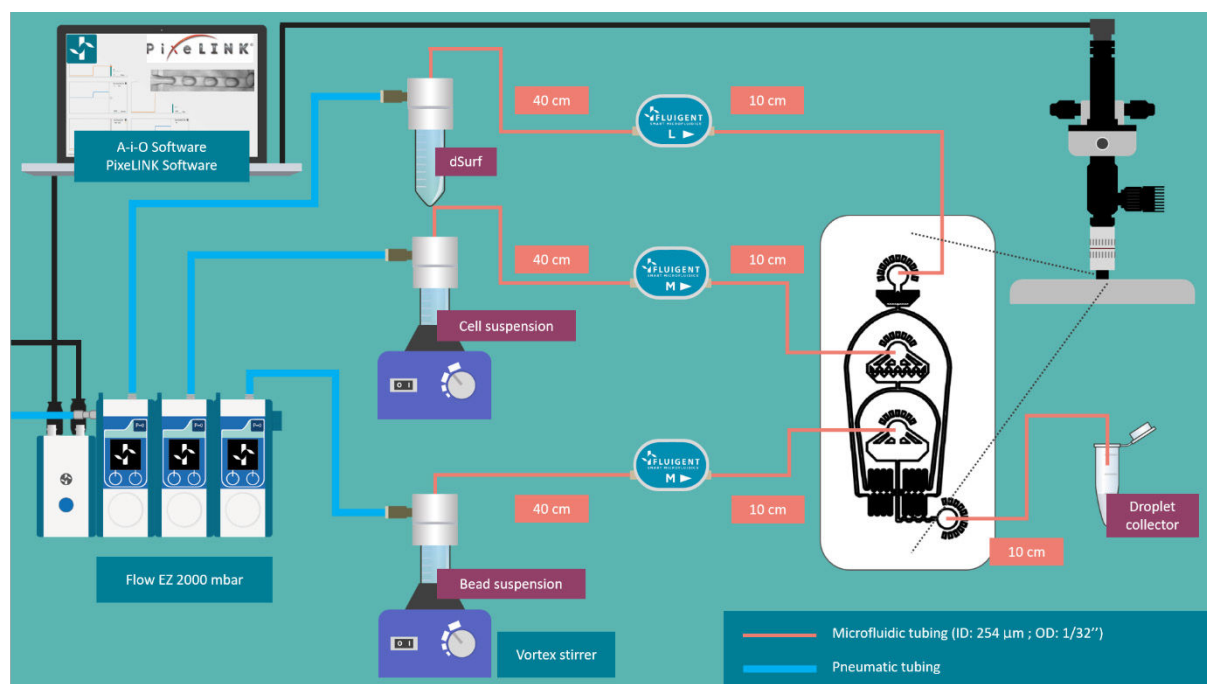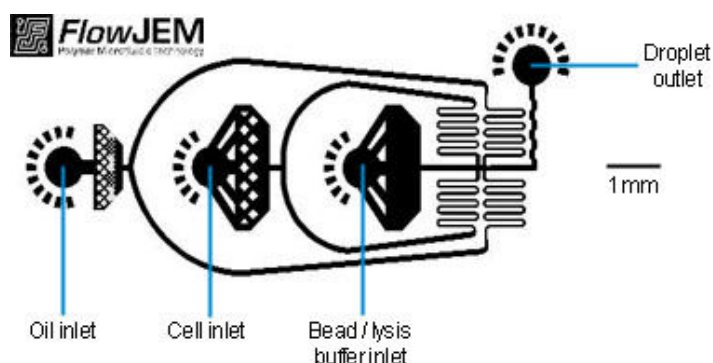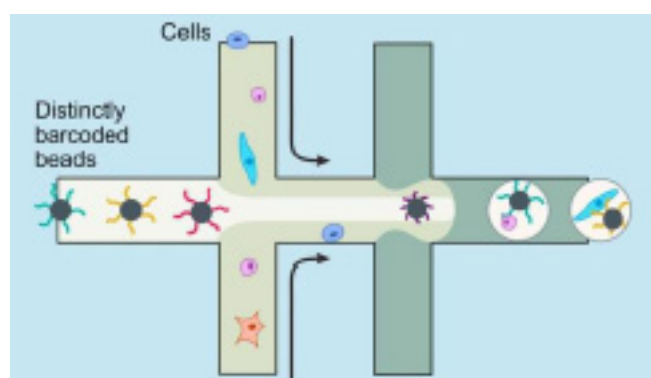# DROPSEQ PACKAGE

FOR OPTIMIZED DROPSEQ EXPERIMENT

ODROPSEQFPCK

DESCRIPTION

Drop-sequencing (Drop-seq) developed by the McCarroll lab, Harvard Medical School, is a method designed for the parallel analysis of mRNA expression in thousands of individual cells following their encapsulation in tiny droplets. These droplets (nanolitre scale) are formed by precisely combining aqueous and oil flows in a specially designed microfluidic device (Drop-seq chip). Expression profiling can then be carried out in tens of thousands of cells in a matter of hours. The Drop-sequencing technique, including methodology is described in Macosko et al. Cell. 2015

afaq ISO 9001 Qualité AFNOR CERTIFICATION

For additional information, contact us by email : contact@fluigent.com or consult our website : www.fluigent.com   **VERSION OCT. 20**

CONTENT

Standard package

3 *FlowEZ 2 bar
1 *Link
1 *Pcap 15 ml
2 *Pcap 2ml
2 *Flow unit M
1 *Flow unit L
DropSeq PDMS chip containing 23 designs
Flow EZ supply kit
Low flow rate kit
High flow rate kit
DropSeq connecting and tubing kit
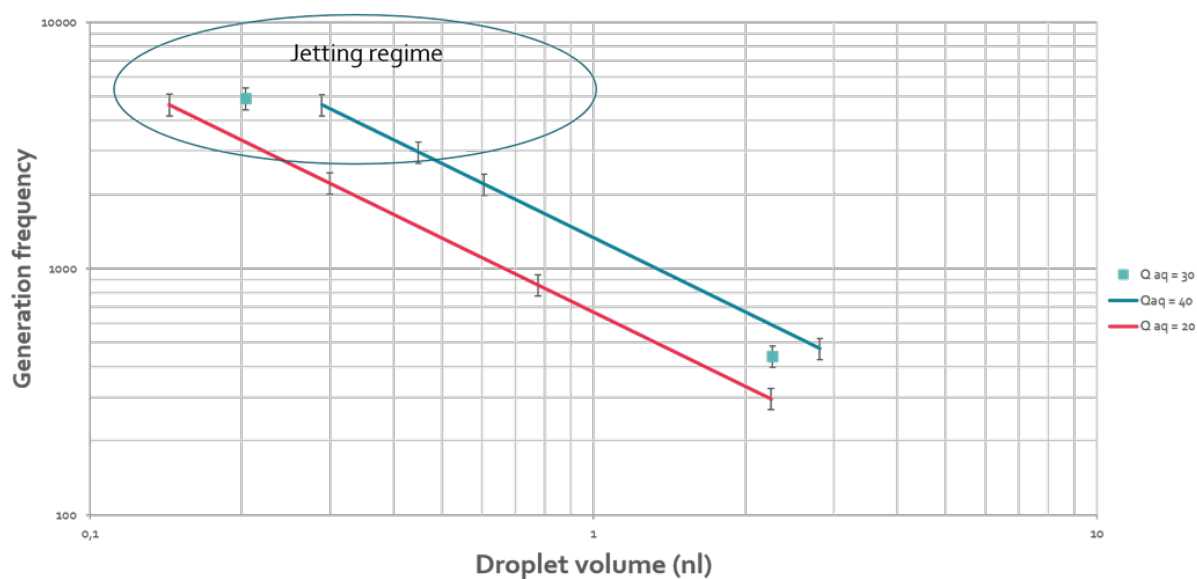A-i-O Software

Optional products

MAT Software
1 * Digital high-speed microscope
12ml dSURF
FPLG

FEATURES AND BENEFITS

» PDMS chip with Silane coating for better reproducibility and longer lifetime

» Latest design: Each droplet generation device is based on the design recommended in the latest McCarroll lab Drop-seq protocol, ensuring the best chances of succes.

» Precision engineered robust devices durable over a wide-range of pressures, temperatures and flow rates

» 23 Droplet generation devices per chip: Provides value for money in a chip which lasts. When the life of one device is depleted, simply move onto the next one

» Produces highly mono-dispersed droplets: Reliable and consistent generation of droplets of optimal size for Drop-sequencing

» Efficient production of transcript libraries: Superior design promotes optimal mixing of component fluids, thereby minimizing bead shearing or premature lysis of cells and mRNA release

PHASE DIAGRAM

Where Qaq = Qcells + Q beads in µl/min

SPECIFICATIONS

Chip Characteristics	PDMS chip for water in oil droplets
	3 inputs / 1 output
	23 devices per chip
Tubing Compatibility	1/32 tubing compatible
Droplet Characteristics	50µm-150µm
Operating pressure	0-2bar
Burst pressure	5 bar
Wetted materials continuous phase	PEEK, PDMS, Glass
Wetted material dispersed phase	PEEK, PDMS, Glass