



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 barcoded cells/lysis buffer, cells 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 Droplet Generation Kit provides all of the components required for fluid mixing and generation of single-cell containing droplets in one convenient purchase

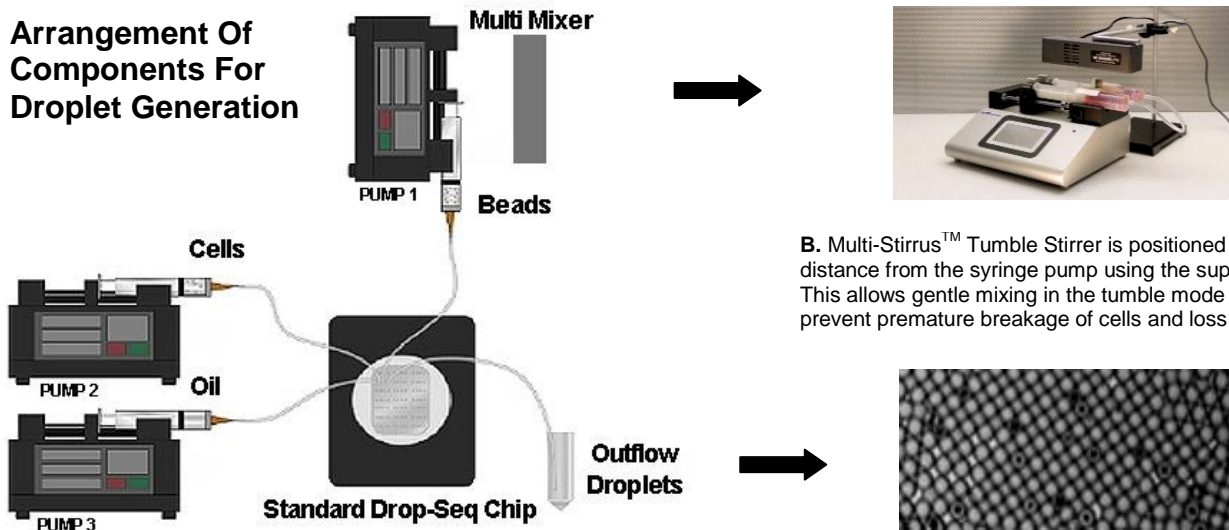


Fig. 1. A. Arrangement of components for Droplet Generation. Barcoded cells/lysis buffer, cells and oil enter the specially designed microfluidic device ([Drop-seq chip](#)) under gentle pressure. Beads are kept in suspension using a stir disc controlled by a Multi-Stirrus™ Tumble Stirrer.

B. Multi-Stirrus™ Tumble Stirrer is positioned at a suitable distance from the syringe pump using the support stand kit. This allows gentle mixing in the tumble mode which helps prevent premature breakage of cells and loss of transcripts.

C. Highly uniform droplets resulting from FlowJEMs' Droplet Generation Device, as seen under the microscope. *Image courtesy of Hemant Suryawanshi, Tuschl Lab, Rockefeller University, NY.*

Features and Benefits

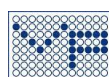
- Convenient Single Purchase**
 All components: Legato 100 Syringe pumps, Multi Stirrus™ Tumble Stirrer, Accessory Kit for positioning Multi-Stirrus™ Tumble Stirrer, Stir Discs and Standard Drop-Sequencing Chip conveniently purchased from one supplier
- Precision Engineered**
 All products expertly manufactured to the same exceptional standard
- As Used By Macosko et al, 2015**
 All critical components are the same as those described in the latest [McCarroll lab Drop-seq protocol](#), ensuring the best possible chance of Drop-sequencing success!

For further information about individual components, see our dedicated [Drop-seq page](#)

Ordering Information

Product Code	Description	Pack Size
FJWSDS-1	Standard Drop-Sequencing Chip	1
WS-DSSP	Legato 100 Syringe Pump	3
VP 710D2CE	Multi-Stirrus™ Tumble Stirrer	1
VP 710D2-4	Accessory Kit for positioning Multi-Stirrus™ Tumble Stirrer	1
VP 782N-6-150	Parylene Encapsulated Neodymium Iron Boron Stir Disc, 6mm Diameter	10
*NB: Other disc types are available – please visit our Drop-seq webpage for further details		

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