



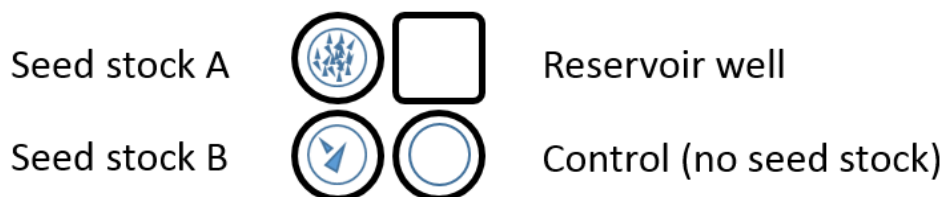
## Two seed stock MMS (Microseed Matrix Screening)




*Dear Crystallographer*

Dispense powerful [MMS](#) screening experiments with an Oryx:

- Dispense using a flexible re-usable [4-channel microtip](#).
- Available for [OryxNano](#) or [Oryx8](#).
- Minimal protein and [seed stock](#) required (virtually zero waste).
- Dispense to any sitting drop plate.
- Easy to use software (image below).

In the example below a 4-channel microtip is used to dispense protein and two seed stocks. The two seed stocks could be from different sources, for instance a similar protein with some homology, or they could be different dilutions of the same seed stock.



<b>Droplet One</b> Protein Volume [µl] 0.15 Seed Stock A Volume [µl] 0.05 Seed Stock B Volume [µl] 0.00 Crystal Screen Volume [µl] 0.10 Droplet Position 		<b>Destination Plate</b> Experiment Type <b>Sitting Drop</b> Sitting Drop Plate <b>SwissCI_3Drop</b> Plate Barcode Wells to be dispensed 96 Dispensed drops per well 3 Number of plates to do 1 Extra plates option <input type="checkbox"/> Use Evaporation Shield <input checked="" type="checkbox"/>	
<b>Droplet Two</b> Protein Volume [µl] 0.15 Seed Stock A Volume [µl] 0.00 Seed Stock B Volume [µl] 0.05 Crystal Screen Volume [µl] 0.10 Droplet Position 		<b>Solution Settings</b> Number of Additives 2 Protein Name Protein Additive 1 Name Seed Stock A Additive 2 Name Seed Stock B Screen Name Crystal Screen Total Protein Required [µl] 43.93 Total Additive 1 Required [µl] 5.15 Total Additive 2 Required [µl] 5.15	
<b>Droplet Three</b> Protein Volume [µl] 0.15 Seed Stock A Volume [µl] 0.00 Seed Stock B Volume [µl] 0.00 Crystal Screen Volume [µl] 0.15 Droplet Position 		<b>Viscosity Settings</b> Protein 1. Like water Additive 1 3. e.g 30% PEG 4k Additive 2 3. e.g 30% PEG 4k Screen (worst case) 3. e.g 30% PEG 4k	

To request a quotation or demonstration please contact [Hilary@douglas.co.uk](mailto:Hilary@douglas.co.uk)

For product support contact [Stefan@douglas.co.uk](mailto:Stefan@douglas.co.uk)

For anything else please contact [Info@douglas.co.uk](mailto:Info@douglas.co.uk)

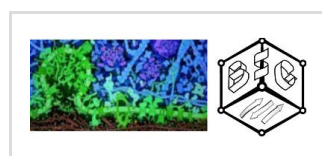
## Douglas Instruments will be at the following meetings:

Visit our booth and pick up a microseeding toolkit containing everything you need to do a [MMS microseeding experiment](#) including a Hampton Research Seed Bead and Crystal Crusher.



AsCA 2016, Hanoi, Vietnam

4 - 7th December 2016



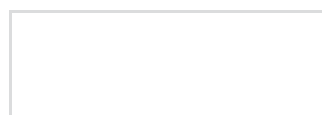
Biological Structures Group Winter Meeting 2016, Birkbeck College, London

December 19th 2016



British Crystallographic Association Spring Meeting 2017, Lancaster University, UK

April 10th - 13th 2016



IUCr 2017, Hyderabad, India



August 21st - 28th 2017

Recent citations of Douglas Instruments products

[Targeting flavivirus RNA dependent RNA polymerase through a pyridobenzothiazole inhibitor](#)

Tarantino D, Cannalire R, Mastrangelo E, Croci R, Querat G, Barreca ML, Bolognesi M, Manfroni G, Cecchetti V, Milani M

Antiviral Research 134 (2016): 226-235.

[Molecular architecture of the human sperm IZUMO1 and egg JUNO fertilization complex](#)

Aydin, H., Sultana, A., Li, S., Thavalingam, A. and Lee, J.E

Nature 534, 562-565 (23 June 2016)

[Crystal structure of the prefusion surface glycoprotein of the prototypic arenavirus LCMV](#)

Hastie, K.M., Igonet, S., Sullivan, B.M., Legrand, P., Zandonatti, M.A., Robinson, J.E., Garry, R.F., Rey, F.A., Oldstone, M.B. and Saphire, E.O

Nature structural & molecular biology, 23(6), pp.513-521

Douglas Instruments [www.douglas.co.uk](http://www.douglas.co.uk)



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Google groups