

Program Name (on pipette)
SampleDilution

User Credentials

Name: sst
Date: 23. Jul. 2018

Overview Method



Description

96 samples in 1.5 ml tubes are diluted with buffer in a 96 well plate.

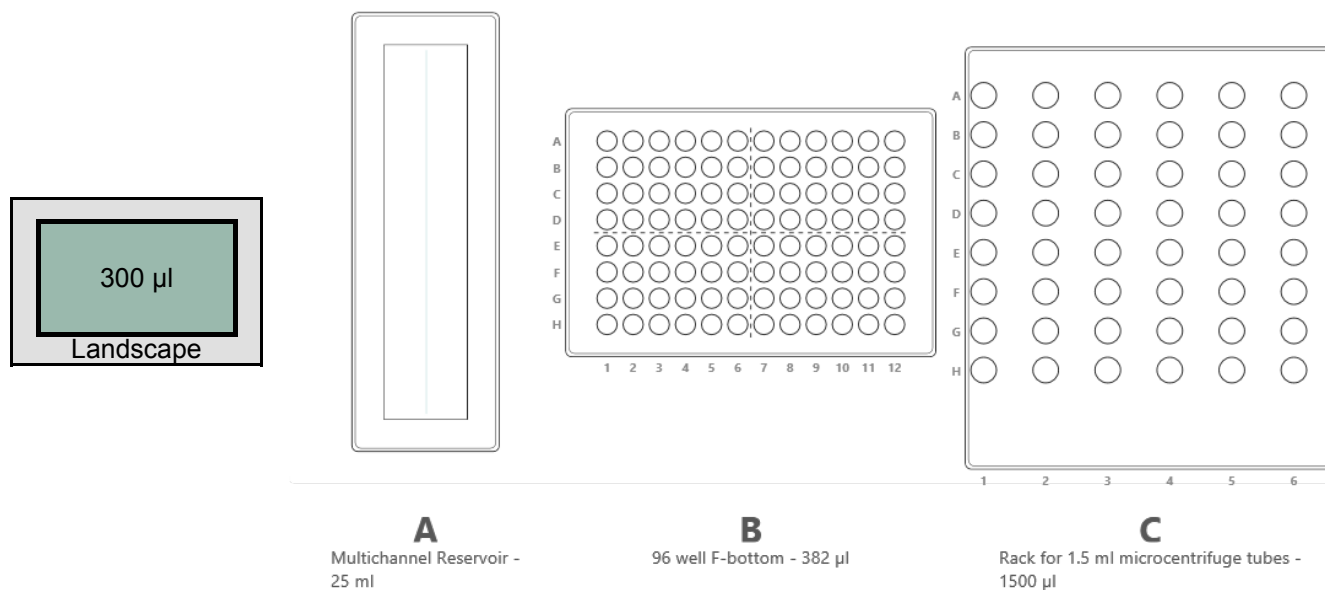
Material:

- Pipette: VOYAGER - 8 ch - 300 µl
- A: Buffer (Multichannel Reservoir 25ml)
- B: Dilution Plate (96 well) - landscape
- C: Samples (Tube Rack)

Method:

- 01: Buffer (A): 20 ml, Dilution Plate (B): empty, Samples 1-48 (C): 500 µl
- 02: The dilution plate is filled with 140 µl of buffer from the reservoir.
- 03: Transfer 100 µl of the samples 1-48 to first half of the dilution plate and mix.
- 04: User is prompted to remove samples 1-48 and load samples 49 - 96 in the tube rack.
- 05: Set volumes of newly loaded samples.
- 06: Transfer 100 µl of the samples 49-96 to the second half of the dilution plate and mix.

Deck Layout




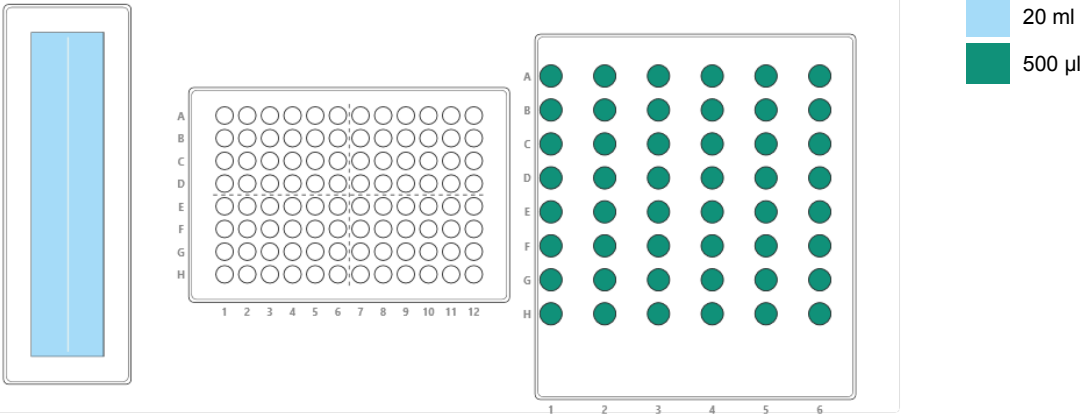

Pipetting Labware


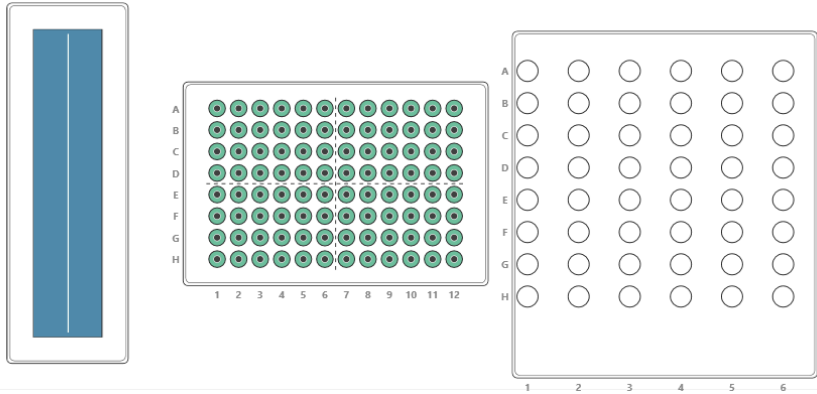
Labware	Name	Manufacturer	Part #
Pipette	VOYAGER 300µl 8 channels	INTEGRA	4723
Pipette Tip	300 µl GripTip, Sterile, Filter, Low retention	INTEGRA	6535
Deck	3 Position Universal Deck	INTEGRA	4520

Deck Labware

Position	Labware	Name	Manufacturer	Part #	Description
A	Reservoir	Multichannel Reservoir - 25 ml	INTEGRA	4310, 4311, 4312	
B	Plate	96 well F-bottom - 382 µl	GREINER	655161, 655101, 655001, 655061	
C	Tube Rack	Rack for 1.5 ml microcentrifuge tubes - 1500 µl	INTEGRA	4540	8x6 1.5 ml microcentrifuge tubes

Method

Step	Description						
<p>1 Initial Volumes</p> 							
<p>2 Message</p> 	<p>Pipetting settings</p> <table border="1" data-bbox="320 779 1485 931"> <thead> <tr> <th data-bbox="320 779 604 831">Tab</th> <th data-bbox="604 779 991 831">Parameter</th> <th data-bbox="991 779 1485 831">Set value</th> </tr> </thead> <tbody> <tr> <td data-bbox="320 831 604 931">Message</td> <td data-bbox="604 831 991 931"> Message Line 1 Message Line 2 Message Line 3 </td> <td data-bbox="991 831 1485 931"> Load samples 1-48 on deck pos C. </td> </tr> </tbody> </table>	Tab	Parameter	Set value	Message	Message Line 1 Message Line 2 Message Line 3	Load samples 1-48 on deck pos C.
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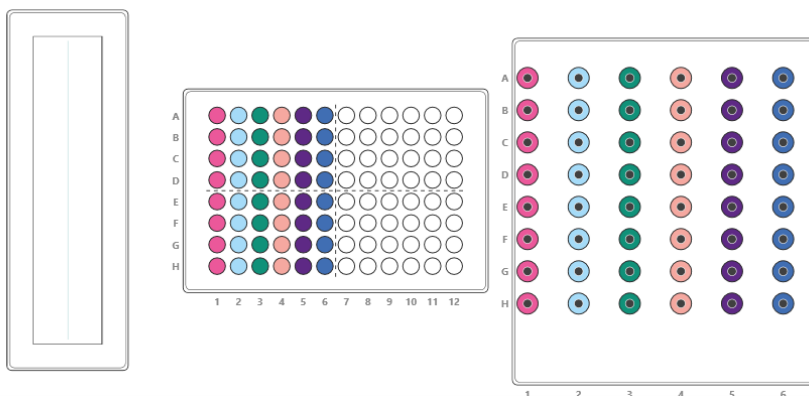
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3	<p>Repeat Dispense</p>  <p>Description: Buffer (140 µl)</p>  <p>Summary pipetting steps</p> <table border="1"> <thead> <tr> <th rowspan="2">Step</th> <th colspan="3">Source</th> <th colspan="3">Target</th> <th rowspan="2">Volume[µl]</th> </tr> <tr> <th>Deck Position</th> <th>Wells</th> <th>Start Height [mm]</th> <th>Deck Position</th> <th>Wells</th> <th>Start Height [mm]</th> </tr> </thead> <tbody> <tr><td>1</td><td>A</td><td>-</td><td>10.3 mm</td><td>B</td><td>A1-H1</td><td>5.7 mm</td><td>140</td></tr> <tr><td>2</td><td>A</td><td>-</td><td>10.3 mm</td><td>B</td><td>A2-H2</td><td>5.7 mm</td><td>140</td></tr> <tr><td>3</td><td>A</td><td>-</td><td>10.3 mm</td><td>B</td><td>A3-H3</td><td>5.7 mm</td><td>140</td></tr> <tr><td>4</td><td>A</td><td>-</td><td>10.3 mm</td><td>B</td><td>A4-H4</td><td>5.7 mm</td><td>140</td></tr> <tr><td>5</td><td>A</td><td>-</td><td>10.3 mm</td><td>B</td><td>A5-H5</td><td>5.7 mm</td><td>140</td></tr> <tr><td>6</td><td>A</td><td>-</td><td>10.3 mm</td><td>B</td><td>A6-H6</td><td>5.7 mm</td><td>140</td></tr> <tr><td>7</td><td>A</td><td>-</td><td>10.3 mm</td><td>B</td><td>A7-H7</td><td>5.7 mm</td><td>140</td></tr> <tr><td>8</td><td>A</td><td>-</td><td>10.3 mm</td><td>B</td><td>A8-H8</td><td>5.7 mm</td><td>140</td></tr> <tr><td>9</td><td>A</td><td>-</td><td>10.3 mm</td><td>B</td><td>A9-H9</td><td>5.7 mm</td><td>140</td></tr> <tr><td>10</td><td>A</td><td>-</td><td>10.3 mm</td><td>B</td><td>A10-H10</td><td>5.7 mm</td><td>140</td></tr> <tr><td>11</td><td>A</td><td>-</td><td>10.3 mm</td><td>B</td><td>A11-H11</td><td>5.7 mm</td><td>140</td></tr> <tr><td>12</td><td>A</td><td>-</td><td>10.3 mm</td><td>B</td><td>A12-H12</td><td>5.7 mm</td><td>140</td></tr> </tbody> </table> <p>Pipetting settings</p> <table border="1"> <thead> <tr> <th>Tab</th> <th>Parameter</th> <th>Set value</th> </tr> </thead> <tbody> <tr> <td>Volumes</td> <td>Volume</td> <td>Fix</td> </tr> <tr> <td>Pipetting Speeds</td> <td>Aspiration Speed Aspiration Delay Dispense Speed Dispense Delay Exit Liquid Slowly</td> <td>8 0 8 0 No</td> </tr> <tr> <td>Pipetting Height</td> <td>Source: Heights Tip Travel Pipetting Height Safety Bottom Offset Target: Heights Tip Travel Pipetting Height End Height</td> <td>Source: Fix No 10.3 mm 2 mm Target: Fix No 5.7 mm 2 mm</td> </tr> <tr> <td>Tip Change</td> <td>Tip Change</td> <td>After step complete</td> </tr> <tr> <td>Mix</td> <td>Source: Mixing Target: Mixing</td> <td>Source: No Target: No</td> </tr> <tr> <td>Tip Touch</td> <td>Tip Touch</td> <td>No</td> </tr> </tbody> </table>	Step	Source			Target			Volume[µl]	Deck Position	Wells	Start Height [mm]	Deck Position	Wells	Start Height [mm]	1	A	-	10.3 mm	B	A1-H1	5.7 mm	140	2	A	-	10.3 mm	B	A2-H2	5.7 mm	140	3	A	-	10.3 mm	B	A3-H3	5.7 mm	140	4	A	-	10.3 mm	B	A4-H4	5.7 mm	140	5	A	-	10.3 mm	B	A5-H5	5.7 mm	140	6	A	-	10.3 mm	B	A6-H6	5.7 mm	140	7	A	-	10.3 mm	B	A7-H7	5.7 mm	140	8	A	-	10.3 mm	B	A8-H8	5.7 mm	140	9	A	-	10.3 mm	B	A9-H9	5.7 mm	140	10	A	-	10.3 mm	B	A10-H10	5.7 mm	140	11	A	-	10.3 mm	B	A11-H11	5.7 mm	140	12	A	-	10.3 mm	B	A12-H12	5.7 mm	140	Tab	Parameter	Set value	Volumes	Volume	Fix	Pipetting Speeds	Aspiration Speed Aspiration Delay Dispense Speed Dispense Delay Exit Liquid Slowly	8 0 8 0 No	Pipetting Height	Source: Heights Tip Travel Pipetting Height Safety Bottom Offset Target: Heights Tip Travel Pipetting Height End Height	Source: Fix No 10.3 mm 2 mm Target: Fix No 5.7 mm 2 mm	Tip Change	Tip Change	After step complete	Mix	Source: Mixing Target: Mixing	Source: No Target: No	Tip Touch	Tip Touch	No
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Step	Description
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4 Transfer



Description:
Samples 1 - 48 (100 µl)



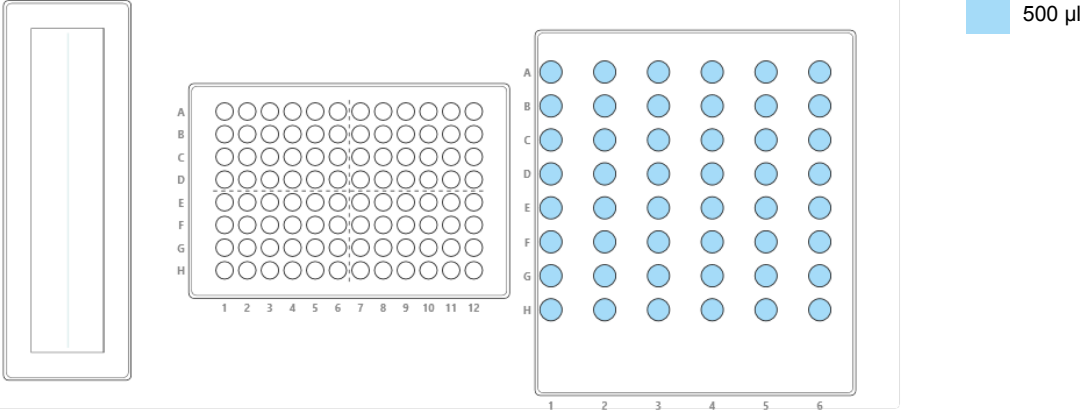



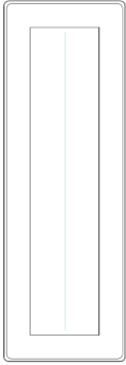
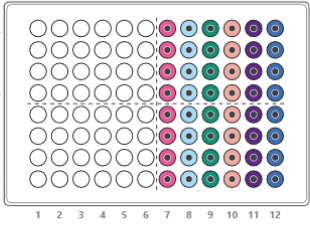
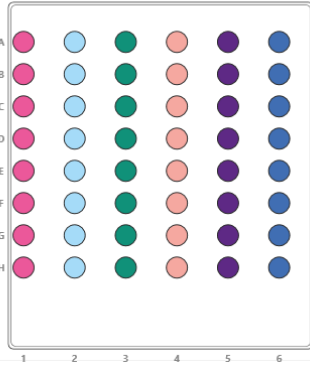
Summary pipetting steps

Step	Source			Target			Volume[µl]
	Deck Position	Wells	Start Height [mm]	Deck Position	Wells	Start Height [mm]	
1	B	A1-H1	5.7 mm	C	A1-H1	30.9 mm	100
2	B	A2-H2	5.7 mm	C	A2-H2	30.9 mm	100
3	B	A3-H3	5.7 mm	C	A3-H3	30.9 mm	100
4	B	A4-H4	5.7 mm	C	A4-H4	30.9 mm	100
5	B	A5-H5	5.7 mm	C	A5-H5	30.9 mm	100
6	B	A6-H6	5.7 mm	C	A6-H6	30.9 mm	100

Pipetting settings

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Pipetting Height	Source: Heights Tip Travel Pipetting Height Safety Bottom Offset Target: Heights Tip Travel Pipetting Height End Height	Source: Fix No 5.7 mm 2 mm Target: Fix No 30.9 mm 2 mm
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6 Set Volumes 	 <p>The diagram illustrates the pipetting setup. On the left is a pipette tip. In the center is a 12x8 well plate with columns numbered 1-12 and rows labeled A-H. On the right is a 6x8 well plate with columns numbered 1-6 and rows labeled A-H. A legend on the far right shows a blue square representing 500 µl. The 6x8 well plate has blue circles in all positions, indicating that all wells in this plate are to be loaded with 500 µl samples.</p>						

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