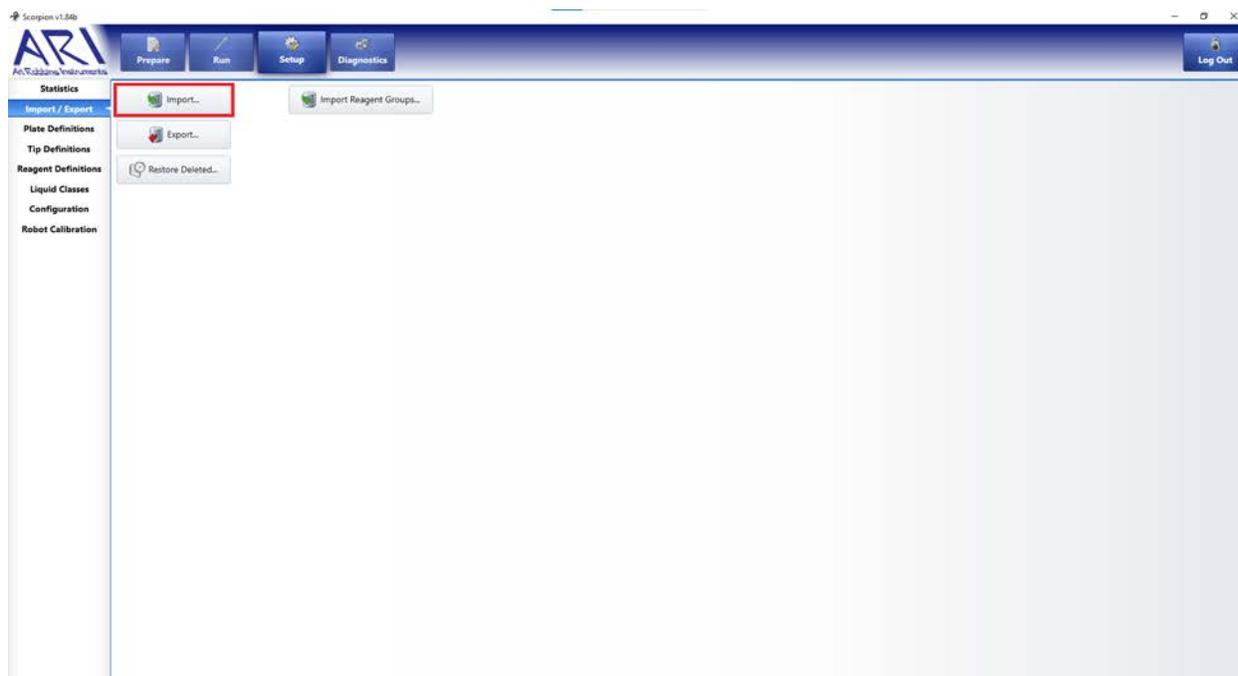


Using Checkit Go with Scorpion Software

- 1) Download the “Art Robbins Instruments Checkit Go Database Files.zip” folder from the [Next Advance website](#) and extract the files. You can also acquire the zip folder by reaching out to Art Robbins at info@artrobbins.com or calling (408) 734-8400 for assistance.
- 2) Open your Scorpion software and press the Log In button on the top right of the home screen. Enter the password “ScorpionARI”.
- 3) Navigate to the Setup tab from the menu at the top of the home page and choose Import/Export from the sidebar options. Press the Import button and select the Checkit Go plate definitions (labeled “Checkit_Go_Plate_Definitions.sdf”) from your file explorer. When you now add a new plate to your workspace in the Prepare tab, the 5 μ L 10 μ L, 20 μ L, and 50 μ L Checkit Go plates should appear at the bottom of the list of plates.



- Import the Checkit Go red dye into your Scorpion software by navigating to Reagent Definitions from the sidebar of the Setup tab. Press the Import button at the top right-hand side of the window, and select "Checkit_Go_Dye_Reagents.csv" from your file explorer. The 5/10µL and 20/50µL dyes should now be added to your list of reagents.

Scorpion v1.34b

ARI ARTROBBINSINSTRUMENTS

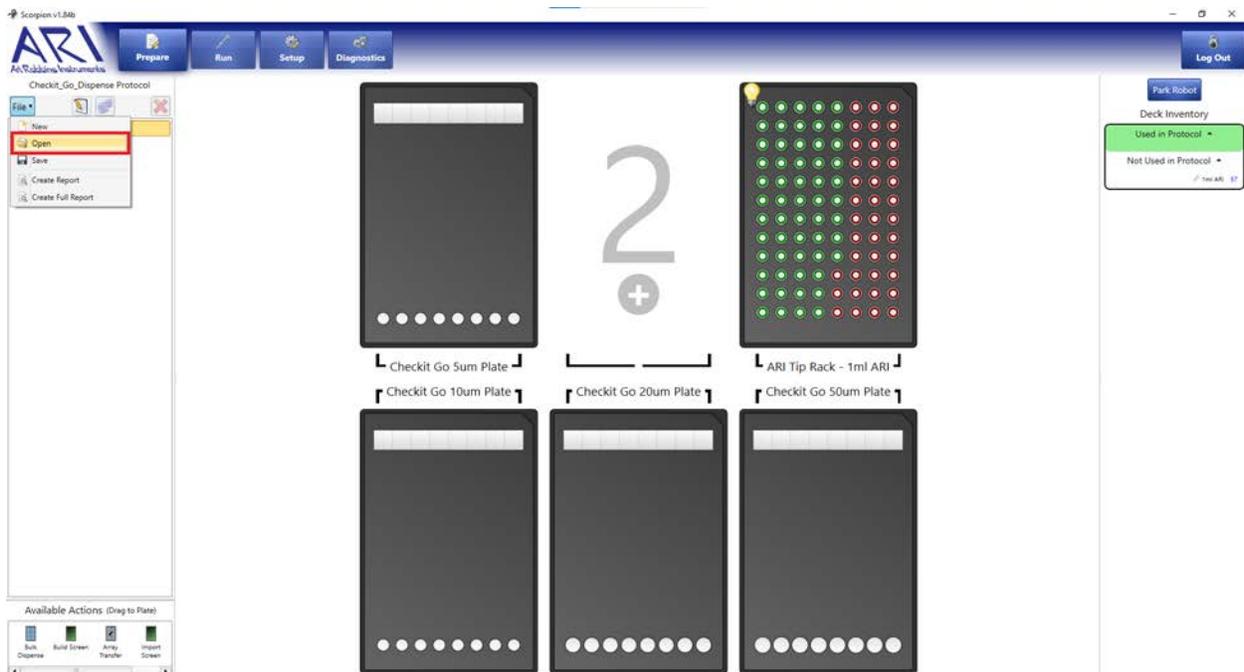
Prepare Run Setup Diagnostics Log Out

Filter by name...

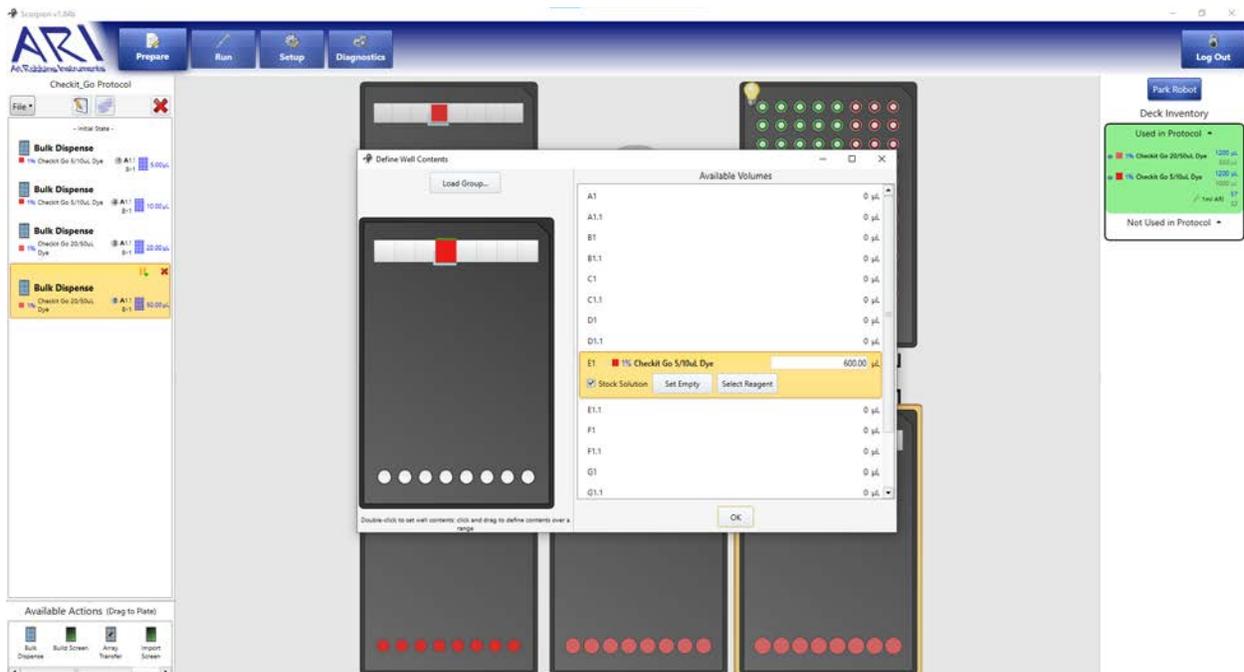
Reagent	Reagent ID	Liquid Class	Concentration	Conc Type	Buffer	pH	Catalog #	CAS #	Manufacturer	Lot #	pKa	Density	Conn Screen	Sample	Hide Conc	Notes
1M Sodium Nitrate	3	1	100	%		0	23119L99	67-63-0	Pharmco-AAPER			0.785				Reagent or HPLC grade is 99% pure BP=40C Viscosity =2.040 at 25C Dielectric = 20.18 at 20C
100% 2-Propanol	6											1				
50% 50% PEG 3350	6	50	%			0						1				
1M Ammonium Acetate	3	1	M			0		631-61-8	Hampton Research			1.012				Salt 1
5M Ammonium Chloride	4	5	M			0		12125-02-9	Hampton Research			1.067				Salt 2
2.5M Ammonium Citrate Dibasic	3	2.5	M			0		3072-65-5	Hampton Research			1.212				Salt 6
10M Ammonium Fluoride	3	10	M			0		12125-01-8	Hampton Research			1.097				Salt 4
2M Ammonium Formate	4	2	M			0	78374-100A-F	540-69-2	Sigma Life Science			1				Stock of 10 M solution diluted to 2M
10M Ammonium Formate	5	10	M			0		540-69-2	Hampton Research			1.123				Salt 5
10M Ammonium Nitrate	5	10	M			0		6484-52-2	Hampton Research			1.267				Salt 8
3.5M Ammonium Phosphate Dibasic	3	3.5	M			0		7783-28-0	Hampton Research			1.226				Salt 7
2.5M Ammonium Phosphate Monobasic	3	2.5	M			0		7722-76-1	Hampton Research			1.14				Salt 3
2M Ammonium Phosphate Monobasic	3	2	M			0		7722-76-1	Hampton Research			1.14				Salt 3
3.5M Ammonium Sulfate	3	3.5	M			0		7783-20-2	Hampton Research			1.214				Salt 9
2M Ammonium Tartrate Dibasic	3	2	M			0		3184-29-2	Hampton Research			1.15				Salt 10
100% AmSO4A1	3	100	%			0						1	<input checked="" type="checkbox"/>			0.2 M Ammonium sulfate
100% AmSO4A10	3	100	%			0						1	<input checked="" type="checkbox"/>			0.2 M Ammonium nitrate, 2.2 M Ammonium sulfate
100% AmSO4A11	3	100	%			0						1	<input checked="" type="checkbox"/>			0.2 M di-Ammonium tartrate, 2.2 M Ammonium sulfate
100% AmSO4A12	3	100	%			0						1	<input checked="" type="checkbox"/>			0.2 M Calcium chloride, 2.2 M Ammonium sulfate
100% AmSO4A2	3	100	%			0						1	<input checked="" type="checkbox"/>			0.2 M Ammonium acetate, 2.2 M Ammonium sulfate
100% AmSO4A3	3	100	%			0						1	<input checked="" type="checkbox"/>			0.2 M Ammonium chloride, 2.2 M Ammonium sulfate
100% AmSO4A4	3	100	%			0						1	<input checked="" type="checkbox"/>			0.2 M Ammonium phosphate, 2.2 M Ammonium sulfate
100% AmSO4A5	3	100	%			0						1	<input checked="" type="checkbox"/>			0.2 M Ammonium fluoride, 2.2 M Ammonium sulfate
100% AmSO4A6	3	100	%			0						1	<input checked="" type="checkbox"/>			0.2 M Ammonium formate, 2.2 M Ammonium sulfate
100% AmSO4A7	3	100	%			0						1	<input checked="" type="checkbox"/>			0.18 M tri-Ammonium citrate, 2.2 M Ammonium sulfate
100% AmSO4A8	3	100	%			0						1	<input checked="" type="checkbox"/>			0.2 M di-Ammonium phosphate, 2.2 M Ammonium sulfate
100% AmSO4A9	3	100	%			0						1	<input checked="" type="checkbox"/>			0.2 M Ammonium iodide, 2.2 M Ammonium sulfate
100% AmSO4B1	3	100	%			0						1	<input checked="" type="checkbox"/>			0.2 M Calcium sulfate, 2.2 M Ammonium sulfate

Import Export History

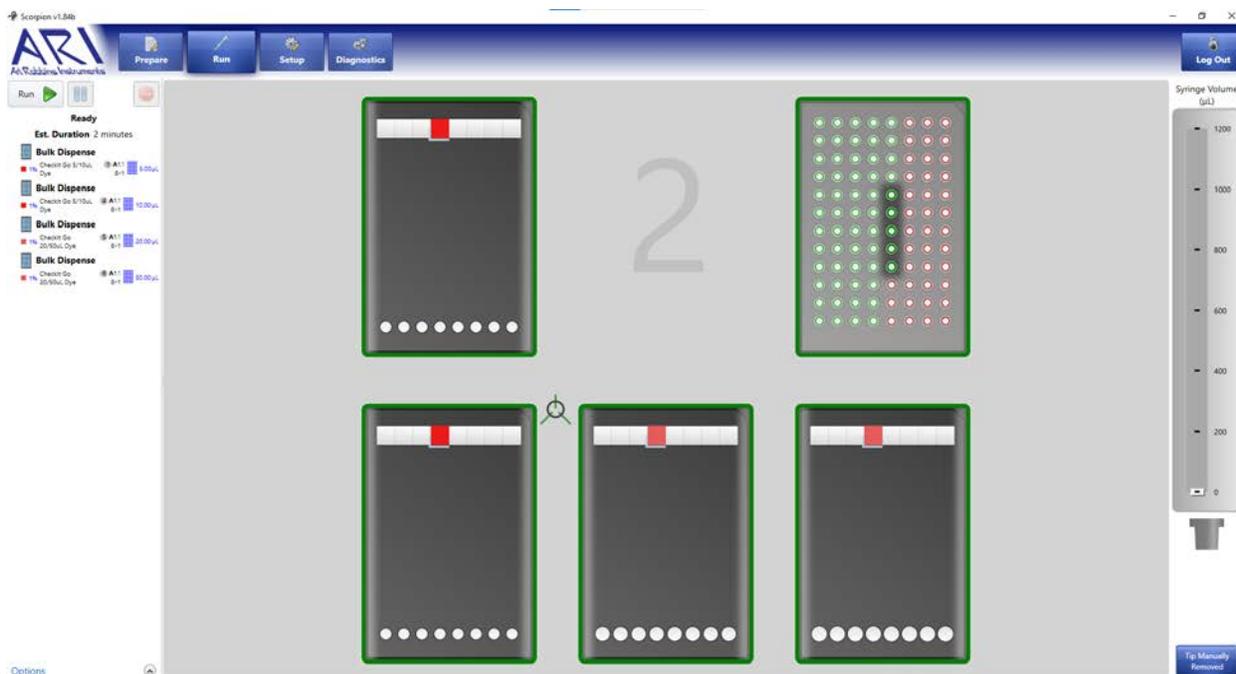
- Next, set up the Checkit Go plates and the dispensing protocol in the Prepare tab. You can either create the protocol yourself or open the premade protocol labeled “Checkit_Go.protocol.sdf” from the database files you received from ARI. If you use the premade protocol, you must arrange the Checkit Go plates in the following order: 5 μ L plate at Deck 1, 10 μ L plate at Deck 4, 20 μ L plate at Desk 5, and 50 μ L plate at Deck 6 (see image below). If you are not using all four plates, you can delete the dispensing steps irrelevant to your setup. If you are not using 1mL tips, edit the tip type in the dispensing steps.



- 6) Double-click on the Checkit Go plates to add the stock solution to the reservoirs of each plate. The Scorpion software considers the reservoir to be made up of 8 distinct rectangular wells. Click on one of the 8 rectangular elements in a reservoir, check Stock Solution, and select the appropriate Checkit Go Dye from the list of reagents. Set the volume to 600 μ L. Repeat this process by double-clicking on a new Checkit Go plate, selecting a part of the reservoir, and adding 600 μ L of the appropriate Checkit Go Dye stock solution.



- 7) Navigate to the Run tab in the Scorpion software. Set up the physical Checkit Go trays in your Scorpion robot's decks and add the red testing dye to the plates' reservoirs. Before running the protocol, ensure the Scorpion door is closed, and the robot arm is roughly located in the center of the enclosure. Once ready, press the Run button.



- 8) Visually inspect the Checkit Go plates to confirm that the Scorpion protocol has operated as intended. When ready, flip up the tabs containing the wells of dispensed red dye by 90 degrees. The red dye should flow through the capillary tubes, and you will now be able to assess the accuracy of the Scorpion's dispensing capabilities.

