S1 Figure

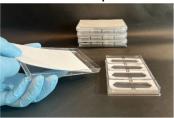
Step 1: Establish a Chemical Gradient

Add test & reference compounds to each arena. Incubate for 60 minutes prior to worm dispensing



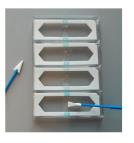


Trap volatile compounds within each lane by inserting a foam sheet into the lid of each plate.



Step 5: Initiate Assays

Remove excess buffer with PVA eye spears to initiate chemotaxis assays.





Step 2: Collect Worms

30 minutes after compound addition, collect worms from plates with water. Wash 2X to rid of bacteria.

Step 3: Resuspend Worms

Prepare worms for dispensing by resuspending worms in chemotaxis buffer containing 18% iodixanol.

Step 4: Dispense Worms to Arenas

Dispense 30ul of worms into arenas with plate stacker & liquid handler set-up.



Step 6: Run Assays

Place assay plates inside dehumidifying dry cabinet for 60 minutes. Record humidity and temperature.



130

S Time (minutes)

60

70

Step 7: Capture Endpoint of Assay

End assays by scanning assay plates (up to 4 at a time) with hacked scanner to acquire .tiff image .