

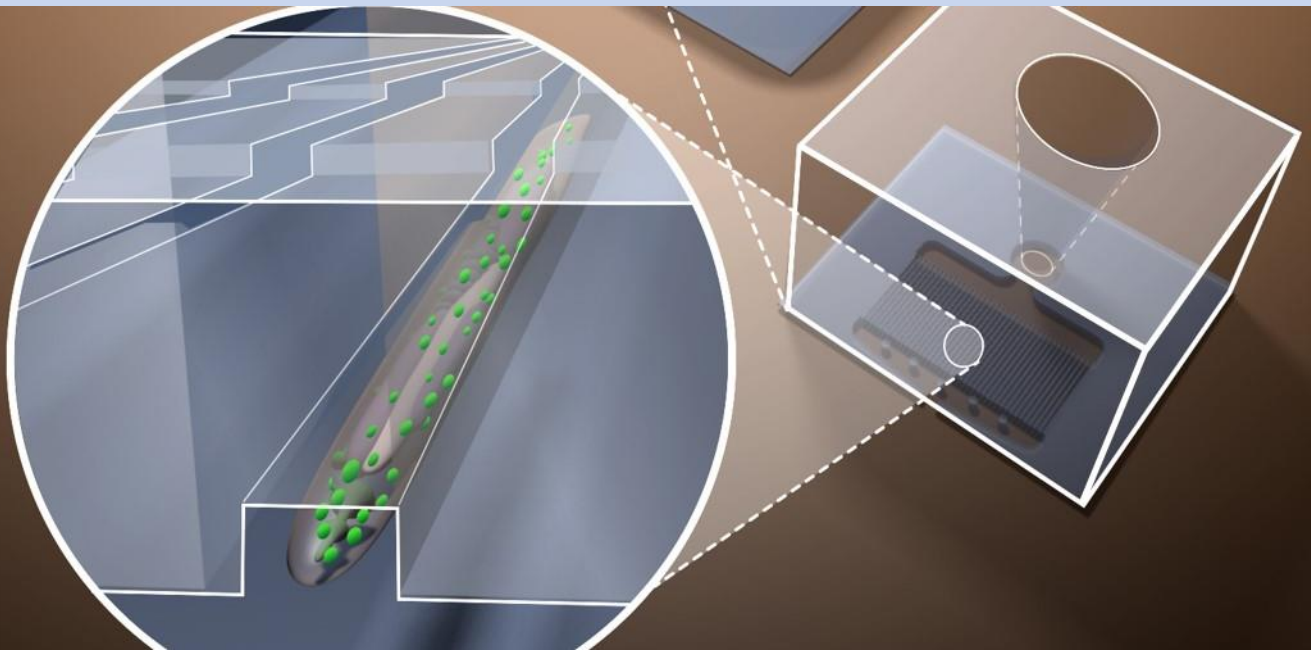


Newormics



*vivo*Chip™

C. elegans imaging platform

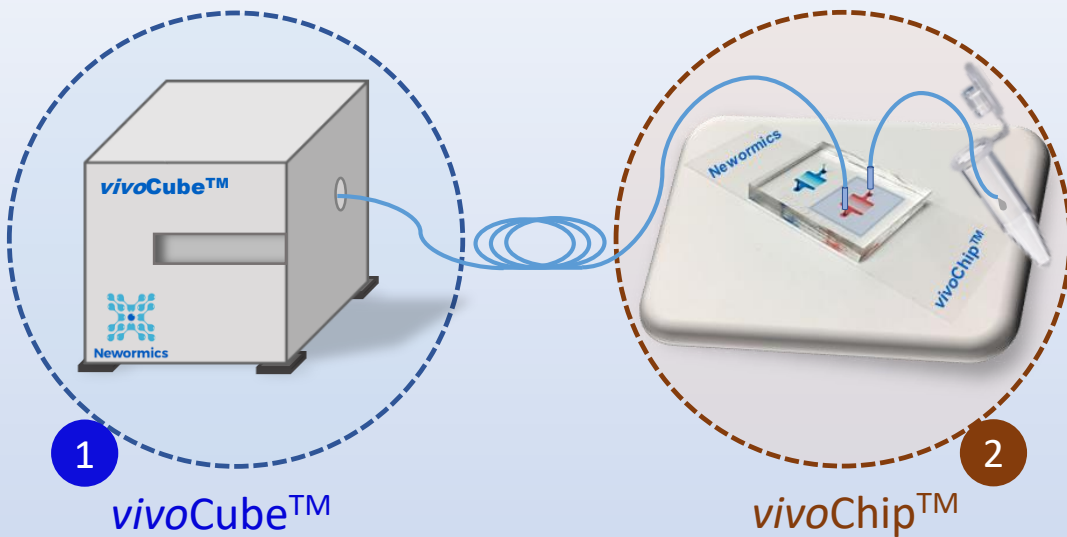


Simplifies *C. elegans* imaging for quantitative phenotyping using a proprietary microfluidic trapping geometry



vivoChip™-2x

Easy to set up and simple to learn (1-hr)



The **vivoChip™-2x** is a microfluidic-based imaging platform that streamlines immobilization, imaging, and image analysis of a large number of age-synchronized *C. elegans* for high-content phenotyping.

The **vivoCube™** is a stand-alone, user-friendly control system that enables you to operate the **vivoChip™-2x** without any previous experience in microfluidics.

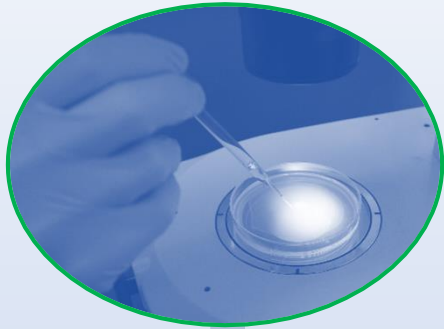
Key features:

- Fast, simple setup to get you up and running
- Two separate devices in one chip
- Each device can immobilize up to 40 animals
- Each device can be used multiple times
- 2 different channel geometries designed to immobilize
 - ❑ L4-YA animals
 - ❑ D1-D5 animals
- User-friendly **vivoCube™** simplifies chip operation
- Animals can be imaged with high magnification (60x oil)
- On-the-fly qualitative analysis by eye within 1-2 minutes
- Collect/save images rapidly for quantitative analysis
- 1-hr video call to help setup and answer questions

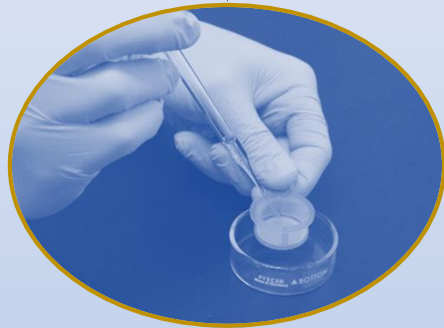
Enabling technology: The **vivoChip™-2x** contains proprietary microfluidic channel geometry to immobilize *C. elegans* in their lateral orientation in pre-determined locations for rapid and high-resolution imaging.

From culture to images in 4 easy steps

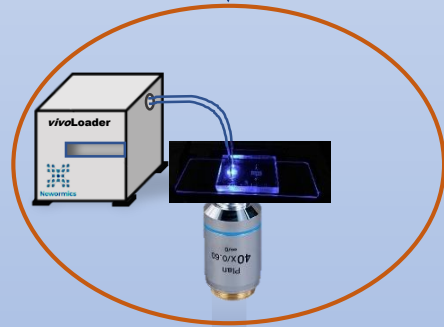
No previous microfluidic experience required



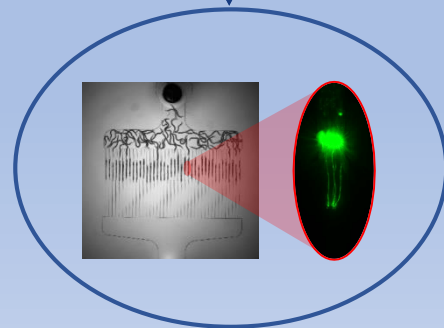
Wash and pick *C. elegans* from culture plate



Filter and select animals for imaging



Load and immobilize animals in < 3 min

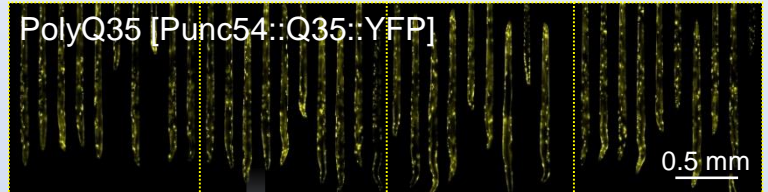
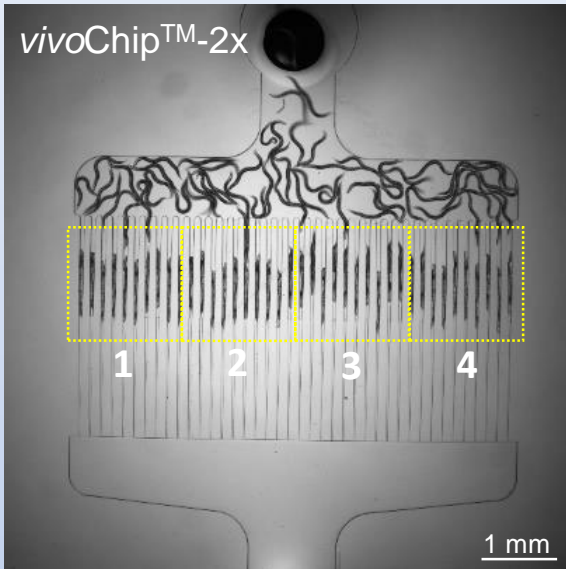


View and image animals in lateral orientation

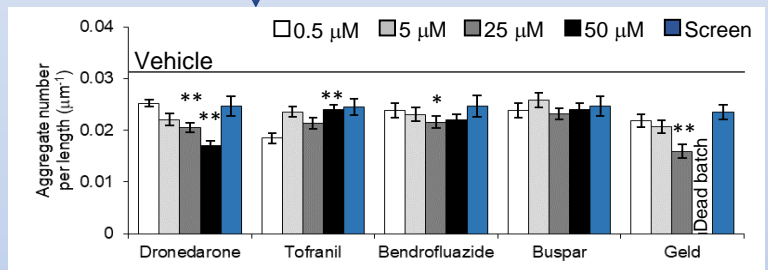
Wide-range of imaging applications

Collect high-resolution images rapidly

*vivoChip*TM-2x enables collecting high-resolution images within minutes for analysis of a wide range of quantitative data that would normally take a few hours when imaging using agar pads.



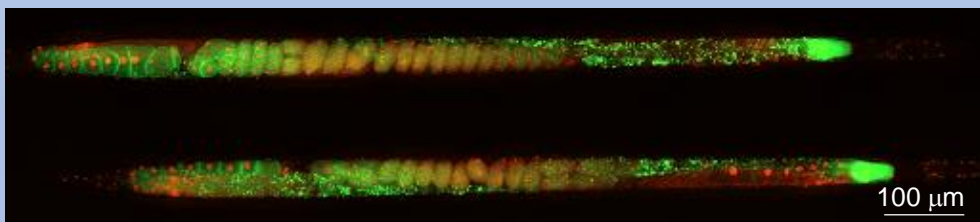
Identify hits using *vivoChip*TM-96x
(Dose-dependent curves)



Nature Communications 7 (13023) 2016

High-resolution imaging to quantify:

- ✓ Developmental phenotypes: body size, number of eggs.
- ✓ Cell-specific fluorescent reporters: muscle, neurons, germlines.
- ✓ Subtle phenotypes: neuron loss, beading axon, localization of reporters.



AUM1039 [pie-1::mCherry::his-58; pie-1::GFP::PH]

Image taken using Lionheart FX (BioTek Instruments) with 20x 0.75 NA

Add-on software: Send your request to receive a customized control software for your camera to acquire z-stack images of the immobilized animals in the *vivoChip*TM-2x.

Check the products that you are interested in the table below.

Email us with your interest: support@newormics.com

Product	Description	Interested in testing prototype	Interested in purchasing
<i>vivoChip</i> TM -2x L4-YA (4 chips/8 devices per pkg)	Two devices per chip for imaging of L4-YA stage animals		
<i>vivoChip</i> TM -2x D1-D5 (4 chips/8 devices per pkg)	Two devices per chip for imaging of D1-D5 stage animals		
<i>vivoCube</i> TM	User-friendly control box		
Fluidic kit	Tubing and accessories		
Liquid reservoir	Buffer reservoir with connectors		
<i>C. elegans</i> filter	For debris-free chip operation		
Camera control software	For automated z-stack imaging	N/A – customized	

Special offer for early adopters: We are offering a limited number of prototype units with free samples of *vivoChip*TM-2x for testing before purchasing.

Email us with your interest: support@newormics.com

Future products:

***vivoChip*TM-96x** will be available to immobilize 96 different populations of *C. elegans* (40 animals per well) for high-content imaging using a plate-reader or a microscope.

***vivoChip*TM-8x or -16x** will be available per interest.

***vivoAnalyzer*TM** will be available to help you to view z-stack images of *C. elegans* immobilized in our *vivoChip*TM and score for phenotypes.

