

Materials List for:

# A High-throughput Assay for the Prediction of Chemical Toxicity by Automated Phenotypic Profiling of *Caenorhabditis elegans*

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URL: <https://www.jove.com/video/59082>

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## Materials

Name	Company	Catalog Number	Comments
2-Propanol	Sigma-Aldrich	59300	
384-well plates	Throme	142761	
Agar	Bacto	214010	
Atropine sulfate	Sigma-Aldrich	PHL80892	
Bleach buffer			0.5 mL of 10 M NaOH, 0.5 mL of 5% NaClO, 9 mL of ultrapure water
Cadmium chloride	Sigma-Aldrich	202908	
Calcium chloride	Sigma-Aldrich	21074	
CCD camera	Zeiss	AxioCam HRm	Zeiss microscopy GmbH
Cholesterol	Sigma-Aldrich	C8667	
Copper(II) sulfate	Sigma-Aldrich	451657	
Ethanol	Sigma-Aldrich	24105	
Ethylene glycol	Sigma-Aldrich	324558	
Glycerol	Sigma-Aldrich	G5516	
K-Medium			3.04 g of NaCl and 2.39 g of KCl in 1 L ultrapure water
LB Broth			10 g/L Tryptone, 5 g/L Yeast Extract, 5 g/L NaCl
Magnesium sulfate heptahydrate	Sigma-Aldrich	63140	
NGM Plate			3 g of NaCl, 17 g of agar, 2.5 g of peptone in 1 L of ultrapure water, after autoclave add 1 mL of cholesterol (5 mg/mL in ethanol), 1 mL of MgSO <sub>4</sub> (1 M), 1 mL of CaCl <sub>2</sub> (1 M), 25 mL of PPB buffer
Peptone	Bacto	211677	
Potassium chloride	Sigma-Aldrich	60130	
Potassium phosphate dibasic	Sigma-Aldrich	795496	
Potassium phosphate monobasic	Sigma-Aldrich	795488	

PPB buffer			35.6 g of K <sub>2</sub> HPO <sub>4</sub> , 108.3 g of KH <sub>2</sub> PO <sub>4</sub> in 1 L ultrapure water
shaker	ZHICHENG	ZWY-200D	
Sodium chloride	Sigma-Aldrich	71382	
Sodium fluoride	Sigma-Aldrich	s7920	
Sodium hydroxide	Sigma-Aldrich	71690	
Sodium hypochlorite solution	Sigma-Aldrich	239305	
The link of program			<a href="https://github.com/weiyangc/ImageProcessForWellPlate">https://github.com/weiyangc/ImageProcessForWellPlate</a>
Tryptone	Sigma-Aldrich	T7293	
Yeast extract	Sigma-Aldrich	Y1625	
Zeiss automatic microscope	Zeiss	AXIO Observer.Z1	Zeiss automatic microscop with peproprietary software Zen2012 and charge coupled device(CCD) camera