

Materials List for

A Simple Microfluidic Chip for Long-Term Growth and Imaging of *Caenorhabditis elegans*

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jove.com/video/63136

Materials

Name	Company	Catalog Number	Comments
18 G needles	Sigma-Aldrich, Bangalore, India	Gauge 18	
3-way stopcock	Cole-Parmer	WW-30600-02	Masterflex fitting with luer lock
CCD camera	Andor Technology	EMCCD C9100-13no	
Circuit board film	Fine Line Imaging, Colorado, USA		The designs are printed with 65,024 dots per inch (DPI)
Convection Oven	Meta-Lab Scientific Industries, India	MSI-5	
Coverslips	Blue stat microscopic cover glass		22mm x 10Gms
Ethanol	Hi media		
Harris uni-core puncher 1mm	Qiagen	Z708801	
Hexamethyldisilazane	Sigma-Aldrich, Bangalore, India	440191	
Hot plate	IKA	RCT B S 22	
Isopropanol	Fisher Scientific	26895	
KOH	Fisher Scientific		
Laser Scanning Microscope	ZEISS	LSM 5 LIVE	
Micropipette tips	Tarsons		0.5-10 μ L micropipette tips are used for food supply
Negative Photoresist-1	Microchem	SU8-2025	http://www.microchem.com/Prod-SU82000.htm
Negative Photoresist-2	Microchem	SU8-2050	http://www.microchem.com/Prod-SU82000.htm
Nitrogen gas	Local Supplier	Commercial nitrogen gas	Cylinder volume of 7 cubic meter
PDMS (Curing solution)	Dow Corning Corporation, MI, USA	Sylgard curing solution	curing agent
Petri plates	Praveen Scientific Corporation		
Plasma cleaner	Harrick Plasma, NY, USA	PDC-32G	
Razor and blades	Lister surgical Blade		
Silicon Elastomer (Base)	Dow Corning Corporation, MI, USA	Sylgard 184 base	elastomer base
Silicon tubes	Fisher Scientific		Plastic tubes with the inner diameter 1.59 mm and the outer diameter 3.18 mm

Silicon wafer	University Wafer, MA, USA	[100] orientation, 4-inch diameter	Small pieces (2 mm × 2 mm) were cut from 100 mm diameter wafer
Spin Coater	SPS-Europe B.V., The Netherlands	SPIN 150	
Spinning Disk microscope	Perkin Elmer ultra-view VOX system	CSU-X1-A3 N	The system was equipped with four (405/488/561/640 nm) lasers and controlled with the Volocity software package.
SU8 developer	Microchem, MA, USA	SU8 Developer	
Trichloro (1H, 1H, 2H, 2H-perfluorooctyl) silane	Sigma-Aldrich, Bangalore, India	448931	Trichloro (1H, 1H, 2H, 2H-perfluorooctyl) silane vapor is toxic
UV lamp	Oriel Instruments, Bangalore, India		200 Watt and collimated UV light source
Volocity software	Perkin-Elmer		Image analysis