Materials List for

4D Microscopy: Unraveling *Caenorhabditis elegans* Embryonic Development using Nomarski Microscopy

Victor Escrich[1], **Begoña Ezcurra**[1], **Eva Gómez-Orte**[1], **Cristina Romero-Aranda**[1], **Antonio Miranda-Vizuete**[2], **Juan Cabello**[1]

[1]CIBIR (Center for Biomedical Research of La Rioja), La Rioja, Spain [2]IBIS (Instituto de Biomedicina de Sevilla), Hospital Universitario Virgen del Rocío/ CSIC/ Universidad de Sevilla, Sevilla, Spain

Corresponding Author

Juan Cabello

juan.cabello@riojasalud.es

Citation

Escrich, V., Ezcurra, B., Gómez-Orte, E., Romero-Aranda, C., Miranda-Vizuete, A., Cabello, J. 4D Microscopy: Unraveling *Caenorhabditis elegans* Embryonic Development using Nomarski Microscopy. *J. Vis. Exp.* (), e61736, doi:10.3791/61736 (2020).

Date Published

October 8, 2020

DOI

10.3791/61736

URL

jove.com/video/61736

Materials

Name	Company	Catalog Number	Comments
Caenorhabditis elegans (N2)	GCG (Caenorhabditis Genetics Center)	N2	WT C. elegans strain. Can be requested at GCG (Caenorhabditis Genetics Center): https://cgc.umn.edu/
Caenorhabditis elegans (VZ454)	GCG (Caenorhabditis Genetics Center)	VZ454	gsr-1(tm3574) C. elegans mutant strain. Can be requested at GCG (Caenorhabditis Genetics Center): https://cgc.umn.edu/
Cell Lineage Tracing software	SIMI	Simi BioCell	This is the software to reconstruct the embryo cell lineage. For a detailed explanation check at: http://www.simi.com/en/products/cell-research/simi-biocell.html
Microscope camera	Hamamatsu	Orca-R2	Miscroscope camera for both transmitted and UV light
Microscope control software	Caenotec	Time to Live	This software controls the microscope to perform the 4D image capture. Can be requested at: Caenotec Prof. Ralf Schnabel Kleine Dorfstr. 9 38312 Börßum, Germany, Ph: ++49 151 11653356 r.schnabel(at)tu-bs.de
Microscope control software	Micro-manager	Micro-manager	This software controls the microscope to perform the 4D image capture. Can be downloaded at: https://micro-manager.org/
Motorized microscope	Leica	Leica DM6000	Motorized upright microscope to perform 4D microscopy
Standard equipment in a Molecular Biology lab.			
Stereomicroscope	Leica	MZ16FA	Steromicroscope to manipulate nematodes and prepare embryos.