

# Assessment of de novo Protein Synthesis Rates in *Caenorhabditis elegans*

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jove.com/video/61170

## Materials

Name	Company	Catalog Number	Comments
Agar	Sigma-Aldrich	5040	
Agarose	Biozym	8,40,004	
Agarose pads 2%			
Calcium chloride dehydrate (CaCl <sub>2</sub> ? 2H <sub>2</sub> O)	Sigma-Aldrich	C5080	
Cholesterol	SERVA Electrophoresis	17101.01	
cycloheximide	Sigma-Aldrich	C-7698	
Dissecting stereomicroscope	Nikon Corporation		SMZ645
<i>edc-3(ok1427);Ex[p<sub>unc-119</sub>GFP, pRF4]</i>	Tavernarakis lab		Maintain animals at 20 °C
Epifluorescence microscope	Zeiss		Axio Imager Z2
<i>Escherichia coli</i> OP50 strain	Caenorhabditis Genetics Center (CGC)		
Fluorescence dissecting stereomicroscope	Zeiss		SteREO Lumar V12
Greiner Petri dishes (60 x 15 mm)	Sigma-Aldrich	P5237	
<i>ife-2(ok306);Ex[p<sub>ife-2</sub>GFP, pRF4]</i>	Tavernarakis lab		Maintain animals at 20 °C
image analysis software	Fiji		<a href="https://fiji.sc">https://fiji.sc</a>
KH <sub>2</sub> PO <sub>4</sub>	EMD Millipore	1,37,010	
K <sub>2</sub> HPO <sub>4</sub>	EMD Millipore	1,04,873	
LB liquid medium			
M9 buffer			
Magnesium sulfate (MgSO <sub>4</sub> )	Sigma-Aldrich	M7506	
Microscope slides (75 x 25 x 1 mm)	Marienfeld, Lauda-Koenigshofen	10 006 12	
Microsoft Office 2011 Excel software package	Microsoft Corporation, Redmond, USA		

<i>N2;Ex[p<sub>ife-2</sub>GFP; pRF4]</i>	Tavernarakis lab		Maintain animals at 20 °C
<i>N2;Ex[p<sub>sod-3</sub>GFP; pRF4]</i>	Tavernarakis lab		Maintain animals at 20 °C
<i>N2;Ex[p<sub>unc-119</sub>GFP; pRF4]</i>	Tavernarakis lab		Maintain animals at 20 °C
Na <sub>2</sub> HPO <sub>4</sub>	EMD Millipore	1,06,586	
Nematode growth medium (NGM) agar plates			
Nystatin stock solution	Sigma-Aldrich	N3503	
Peptone	BD, Bacto	211677	
Phosphate buffer			
Sodium chloride (NaCl)	EMD Millipore	1,06,40,41,000	
Standard equipment for preparing agar plates (autoclave, Petri dishes, etc.)			
Standard equipment for maintaining worms (platinum wire pick, incubators, etc.).			
statistical analysis software	GraphPad Software Inc., San Diego, USA		GraphPad Prism software package
Streptomycin	Sigma-Aldrich	S6501	
UV Crosslinker	Vilber Lourmat BIO-LINK BLX 254		
Worm pick			