

Materials List for

# Label-Free Imaging of Lipid Storage Dynamics in *Caenorhabditis elegans* using Stimulated Raman Scattering Microscopy

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jove.com/video/61870

## Materials

Name	Company	Catalog Number	Comments
A/D converter	Olympus	Analog Unit	
Agarose	GeneMate	3119	For making agarose pads
Alignment tool - adapter	Thorlabs	SM1A4	For mounting the tool on scope
Alignment tool - target	Thorlabs	VRC2SM1	For viewing IR laser
Alignment tool - tube	Thorlabs	SM1L40	Length can vary
Autocorrelator (Optional)	APE	pulseCheck	
Bandpass filter	minicircuits	BBP-21.4+ if modulated at 20MHz or KR Electronics 2724 if modulated at 8 MHz	For signal with modulation frequency filtering
BNC cables			
Dissection microscope	Nikon	SMZ800	For handling and picking worms for imaging
Dodecane	Sigma-Aldrich	44010	Used for calibration of the SRS signal
Filter	Chroma Technology	890/220 CARS	For removing Stokes beam
General purpose laboratory labeling tape	VWR	89097	For making agarose pads
Glass coverslips	VWR	48393-106	For covering worms for imaging
Glass microscope slide	VWR	16004-422	For making agarose pads
Laser scanning microscope	Olympus	FV3000	
Lens	Thorlabs	L1: AC254-050-B L2: AC254-075-B	For beam expander
Lock-in amplifier	Zurich	HF2LI	
Lowpass filter	minicircuits	BLP-1.9+	For power supply noise suppression
Mirrors	Thorlabs	BB1-E03	For relay and periscope
Objective	Olympus	UPlanSAPO 20x 0.75, UPlanSAPO 60XW 1.20	
Photodiode	Thorlabs	FDS1010	

Picosecond laser source	APE	picoEmerald	
Power supply	TEKPOWER	TP1342U	For photodiode, reversed 50V voltage
Sodium azide	Sigma	S2002	For anaesthetizing the worms
Worm picker	WormStuff	59-AWP	