

Materials List for:

Implementation of a Coherent Anti-Stokes Raman Scattering (CARS) System on a Ti:Sapphire and OPO Laser Based Standard Laser Scanning Microscope

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URL: <https://www.jove.com/video/54262>

DOI: [doi:10.3791/54262](https://doi.org/10.3791/54262)

Materials

Name	Company	Catalog Number	Comments
Oscilloscope	Tektronix	TDS 520D	500 MHz
Photodetector	Thorlabs	DET08C/M, T4290	5 GHz InGaAs, 800 - 1,700 nm
Ti:Sapphire laser Chameleon Ultra Family II	Coherent		
Optical parametric oscillator OPO Compact Family	APE Berlin		
Axio Examiner microscope LSM 7 MP	Carl Zeiss		
Motorized periscope	Newport		
Objective W Plan-Apochromat 20X/1.0	Carl Zeiss		
Beam combiner	Carl Zeiss		
Acousto-optic modulator	Carl Zeiss		
OPO power attenuator	Carl Zeiss		
Photomultiplier tube	Carl Zeiss		
ZEN software	Carl Zeiss		
Bandpass filters	Carl Zeiss	LSM BiG 1935-176	400 - 480 nm; 500 - 550 nm; 465 - 610 nm
Dichroic mirror	Carl Zeiss		Cutoff wavelength 760 nm
Silver mirrors	Newport	10D20ER.2	$\lambda/10$, 480 - 20,000 nm, Quantity 4
Single-axis translation stage with standard micrometer	Thorlabs	PT1/M	Quantity 1
Aluminium breadboard	Thorlabs	MB1015/M	Quantity 1
Mirror mount	Thorlabs	KMSS/M	Quantity 4
Mirror holder for Ø1" Optics	Thorlabs	MH25	Quantity 4
Iris diaphragms	Thorlabs	ID8/M	Quantity 3
Protective box	Thorlabs	TB4, XE25L900/M, T205-1.0, RM1S	Quantity 1
Optical posts	Thorlabs	TR40/M, PH50/M, PH75/M, BA2/M	Quantity 8 (lengths depending on the set-up)
661 - 690 nm bandpass filter	Semrock	676/29 nm BrightLine® single-band bandpass filter	Quantity 1

Fluorescent beads	ThermoFisher	TetraSpeck™ Fluorescent Microspheres Size Kit	
Laser viewing card	Thorlabs		IR laser viewing card
Laser safety glass	Newport	LV-F22.P5L07	
FluoroMyelin™ Red Fluorescent Myelin Stain	ThermoFisher	F34652	