

Materials List for

# Label-free Super-resolution Imaging Enabled by Vibrational Imaging of Swelled Tissue and Analysis

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jove.com/video/63824

## Materials

Name	Company	Catalog Number	Comments
1.0 M Tris pH 8	Sigma-Aldrich	648314	
16% Paraformaldehyde	Electron microscopy science	15710	diluted to 4% in PBS
25x water immersion objective	Olympus	XLPLN25XWMP2	NA 1.05
5XFAD Mice	Mutant Mouse Resource and Research Centers and the Jackson Laboratory	B6SJL-Tg (APPSwFILon, PSEN1* <sup>M146L</sup> * <sup>L286 V</sup> ) 6799Vas/Mmjax	Alzheimer brain
60x water immersion objective	Olympus	UPLSAPO60XWIR	NA 1.2
Acrylamide	Sigma-Aldrich	A9099	
ammonium persulfate	Sigma-Aldrich	A3678	
anti-MAP2	Cell Signaling Technology	8707	
anti-NeuN	Cell Signaling Technology	24307	
borosilicate coverslip #1.5	Fisher Scientific	1254581	
C57BL/6J Mice	Jackson Laboratory (JAX)	664	Normal mice
D2O	Sigma-Aldrich	151882	for SRS calibration
DAPI	Thermo Fisher	D1306	
DMEM	GIBCO	10566-016	
FBS	GIBCO	A4766	
glass slide 3" x 1" x 1 mm	VWR	16004-430	
goat anti-chicken IgY, Alexa Fluor 647	Invitrogen	A-21449	
goat anti-mouse IgG, Alexa Fluor 647	Invitrogen	A-21236	
goat anti-rabbit IgG, Alexa Fluor 488	Invitrogen	A-11034	
goat anti-rat IgG, Alexa Fluor 568	Invitrogen	A-11077	
Grace Bio-Labs Press-To-Seal silicone isolators	Sigma-Aldrich	GBL664108	microscope spacer
Htt-97Q-GFP Plasmid	Gift from Prof. R. Kopito and Prof. F.-U.Hartl.		
Laser scanning microscope	Olympus	FV3000	laser scanning confocal microscope
lipofectamine 3000	Thermo Fisher	L3000001	transfection agent

Lycopersicon Esculentum Lectin DyLight@594 (lectin)	Vector Laboratories	DL-1177-1	
Microscope spacer	Grace Bio-Labs	621502	
N,N'-methylenebisacrylamide (BIS)	Sigma-Aldrich	M1533	bought as 2% solution in water
Nuclease free water	Thermo Fisher	10977-015	
Penicillin-Streptomycin	GIBCO	15140-122	
poly-strene beads	Sigma-Aldrich	43302	for resolution characterization
Sodium Acrylate	Sigma-Aldrich	408220	
sodium dodecyl sulfate	Sigma-Aldrich	71725	
soft-wool paint brush #3	TANIS	000333	
SRS Laser	A.P.E	picoEmerald	2ps pulse width
tetramethylethylenediamine	Sigma-Aldrich	T9281	
Tissue culture flask 25 cm <sup>2</sup>	Corning	430639	
Triton X-100	Sigma-Aldrich	T8787	
Tween-20	Sigma-Aldrich	P9416	
tweezer	Fine Science Tool	11295-51	
Vibrotome	Leica	VT1200S	the vibratome