

Materials List for:

Non-invasive Optical Imaging of the Lymphatic Vasculature of a Mouse

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URL: <https://www.jove.com/video/4326>

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Materials

Name	Company	Catalog Number	Comments
Indocyanine green (ICG)	Patheon Italia S.P.A.	NDC 25431-424-02	Reconstitute to 645 μ M (5 μ g/10 μ L)
Cyclic Albumin Binding Domain(cABD)	Bachem	Custom	Reconstitute to 200 μ M (6.8 μ g/10 μ L)
IRDye800	Li-COR	IRDye 800CW	Reconstitute according to manufacture's instructions; conjugate with cABD at equimolar concentrations
Sterile Water	Hospira, Inc., Lake Forest, IL	NDC 0409-4887-10	
NAIR	Church Dwight Co., Inc.	Local Stores	www.nairlikeneverbefore.com
Imaging System (components below)	Center for Molecular Imaging	N/A	Custom-built in our laboratories.
Electron-multiplying charge-coupled device (EMCCD) camera	Princeton Instruments, Trenton, NJ	Photon Max 512	
Nikon camera lens	Nikon Inc., Melville, NY	Model No. 1992, Nikkor 28mm	
Optical filter	Andover Corp., Salem,NH	ANDV11333	Two 830.0/10.0 nm bandpass filters are used in front of lens
785-nm laser diode	Intense Ltd, North Brunswick, NJ	1005-9MM-78503	500 mW of optical output
Collimating optics	Thorlabs, Newton, NJ	C240TME-B	Collimates laser output prior to cleanup filter
Clean-up filter	Semrock, Inc., Rochester, NY	LD01-785/10-25	Removes laser emission in fluorescence band
Optical diffuser	Thorlabs, Newton, NJ	ED1-C20	Diffuses the laser over the animal
V++	Digital Optics, Browns Bay, Auckland, New Zealand	Version 5.0	Software used to control camera system and save images to computer. http://digitaloptics.net/
<i>Analytic Software</i> Either of the following software packages can be used for image analysis			
ImageJ	National Institutes of Health, Bethesda, MD	Most current version available	Freeware available at http://rsbweb.nih.gov/ij/
MATLAB	MathWorks, Natick, MA	Version 2008a or later	http://www.mathworks.com/