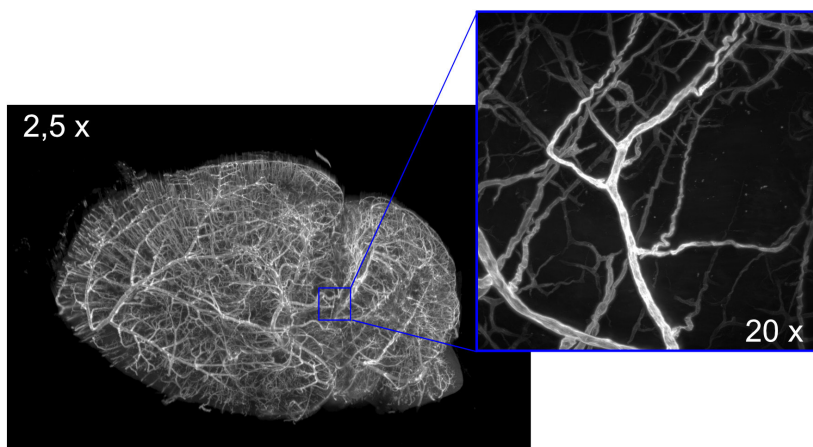


Enhance your Lightsheet Z.1 with clearing capabilities

ZEISS Lightsheet Z.1 upgrade packages



Mapping Vasculature of Entire Mouse Brain: A C57 BL6J mouse was perfused with PBS and 4% PFA. The brain was stained perfusing Cell-Tracker™ CM-Dil Dye – a lipid dye to label the vasculature membranes. The sample was cleared using iDISCO+ protocol, equilibrated in ethyl cinnamate as final RIMS. It was then imaged in ethyl cinnamate at RI = 1.565 with detection optics Fluor 2.5x / 0.12 in a Translucence Mesoscale Imaging Chamber. The high resolution insert image on the right was acquired with Clr Plan-Neofluar 20x / 1.0 Corr nd = 1.53. Sample courtesy of E. Diel, D. Richardson, Harvard University, Cambridge, USA

Light sheet fluorescence microscopy (LSFM) with its unique illumination principle is ideal for fast and gentle imaging of whole living model organisms, tissues and cells as they develop. Flexibly expand your opportunities to image very large optically cleared specimens in toto, and with subcellular resolution.

Enhance your Lightsheet Z.1 to enable imaging at refractive indices from 1.33 to 1.58 in almost all imaging media. Newly introduced optics and sample chambers enable you to benefit from best image quality and perfectly focused light sheets in any medium as well as more space for your sample in a larger sample chamber. A new sample holder concept and software provide easier workflows for sample mounting, experiment setup and image data processing.

Highlights

Improved image processing

Benefit from significantly improved visualization, deconvolution and analysis as well as enhanced processing workflows for large data processing.

Enhanced image quality and stability

Profit from best image quality, thanks to newly designed optics and software tools which help you adjust imaging parameters to generate the illumination light sheet.

Image optically cleared specimens

Lightsheet Z.1 now enables imaging of optically cleared specimens at refractive indices from 1.33 to 1.58 in almost any imaging medium.

Maximum sample size

Image samples at the millimeter scale by comfortably mounting them with the new smart sample holder in new sample chambers with enlarged volumes.

Imaging across scale

Employ this technique to image very large optically cleared specimens in subcellular resolution and in toto.



Seeing beyond

ZEISS Lightsheet Z.1 upgrade packages

Enhance your Lightsheet Z.1 with clearing capabilities

Recommended upgrade packages

Package 1

Includes:

- Workstation upgrade
- Graphics card
NVIDIA Quadro P4000 8GB
- Windows 10
- ZEN 3.1 for Lightsheet
- ZEN feature upgrade for
Lightsheet Z.1

Optional:

- Storage PC upgrade (Win 10,
Graphics card NVIDIA Quadro
P4000 8GB/P6000 24 GB,
ZEN 3.1 for Lightsheet)

Key Benefits:

- More efficient processing
- Higher frame rate for acquisition
- Enables for additional hardware
upgrade

Package 2

*Sample chamber "large"
at 5x Magnification (RI 1.35-1.58)*

Includes Package 1 plus:

- 5x Magnification Option
*Includes: Detection optics,
illumination optics, sample
chamber*

Optional:

- Storage PC upgrade (Win 10,
Graphics card NVIDIA Quadro
P4000 8GB/P6000 24 GB,
ZEN 3.1 for Lightsheet)
- Smart Sample Holder

Key Benefits:

- Imaging at refractive indices
from 1.33 to 1.58 at overview
magnification (5x)
- Continuous adjustment of
lightsheet focus

Package 3

*Sample chamber "clearing 20x"
at 20x Magnification (RI 1.35-1.58)*

Includes Package 1 plus:

- 20x Magnification Option
*Includes: Detection optics,
illumination optics, sample
chamber*

Optional:

- Storage PC upgrade (Win 10,
Graphics card NVIDIA Quadro
P4000 8GB/P6000 24 GB,
ZEN 3.1 for Lightsheet)
- Smart Sample Holder

Key Benefits:

- Imaging at refractive indices
from 1.33 to 1.58 at detail
magnification (20x)
- Continuous adjustment of
lightsheet focus

