

CLARITY Tissue Clearing Kit



“Amazing kit. I struggled with optimizing a similar tissue clearing technique before, so I really appreciate that you made this amazing kit.”

– Yusuke Suita, Ph.D. Candidate, Tapinos Laboratory of Cancer Epigenetics and Plasticity at Brown University



PRODUCTS

CLARITY Tissue Clearing Kit



Products Sold Separately



Embedding Solution



Embedding Solution



Immunostaining Buffer



Lipid Clearing Solution



Wash Buffer 1 Solution



Wash Buffer 2 Solution

Visit website for latest specifications and safety data sheets.



PRODUCT

CLARITY Tissue Clearing Kit (High or Low Lipid)

DESCRIPTION

CLARITY Tissue Clearing Kits are for researchers who wish to perform lipid clearing of soft tissues using the CLARITY protocol. CLARITY is a tissue clearing method used to render tissues optically transparent, allowing for non-destructive tissue processing and 3D imaging of both normal and diseased tissues. Use the High Lipid version if your tissue is higher in lipids, e.g., brain tissue or lymph nodes. These tissues are generally more “squishy” compared to low lipid solid tissues. For low lipid tissues e.g., kidney, most cancerous tissue, liver, or tonsil, choose the Low Lipid version.

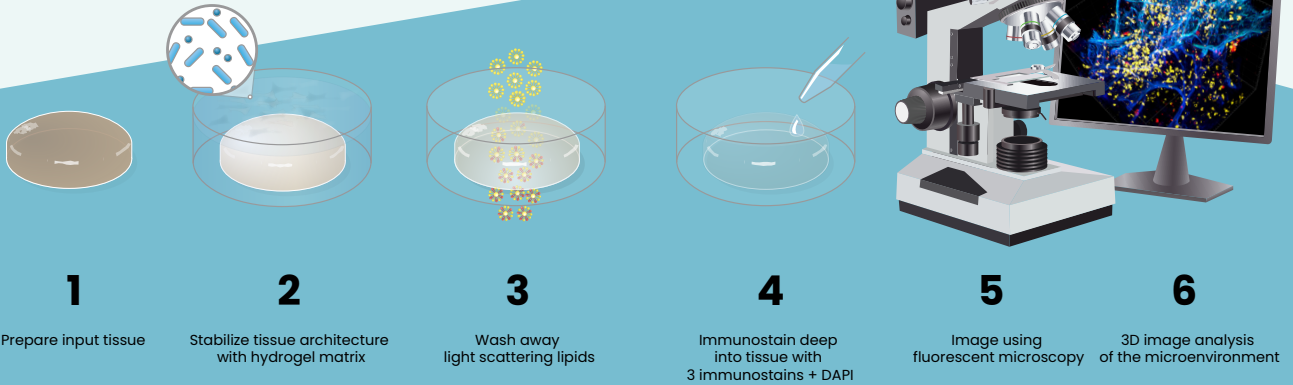
CONTENTS

CLARITY Lipid Embedding Solution – High Lipid (90 mL) or Low Lipid (62.5 mL), Thermal Initiator (1 g), Wash Buffer 1 (101 mL), CLARITY Lipid Clearing Solution (1000 mL), Wash Buffer 2 (101 mL), RapiClear Solution (20 mL), Procedures and Guidance Insert

CLEAR

STAIN

IMAGE



TISSUE PROCESSING WORKFLOW

In the CLARITY tissue clearing method, the tissue is first embedded with hydrogel monomers to create a matrix scaffold, then the light scattering lipids are removed. After lipid clearing, the tissue-hydrogel hybrid is both transparent to light and permeable to molecules, enabling immunostaining and imaging using a confocal or light-sheet microscope.

The CLARITY Tissue Clearing Kit – Low Lipid and High Lipid products support steps 1-3 in the Tissue Processing Workflow diagram above. Detailed Procedures and Guidance are included with each purchase.

For immunostaining soft tissues after tissue clearing, step 4 in the diagram, use the immunostaining buffer, sold separately. To image cleared tissue, researchers will need to use the refractive index matching solution included in each kit.

Researchers who wish to pursue 3D image analysis of the tissue microenvironment can leverage ClearLight's lab services.

<https://clearlightbio.com/leverage>

AUTHORIZED RESELLER



ABOUT US

Founded by Karl Deisseroth M.D., Ph.D., ClearLight Biotechnologies provides pharmaceutical, biotechnology, and academic researchers with CLARITY Tissue Clearing, 3D immunostaining, and Tru3D image analysis services. ClearLight technology is based on the CLARITY lipid-clearing technique developed by Dr. Deisseroth and colleagues at Stanford University. This technology, paired with proprietary 3D image analysis software in development, empowers researchers to "See More Biology" within the tissue microenvironment. ClearLight Bio is developing technologies to improve diagnostic, prognostic, and predictive treatment of disease so we can all live healthier lives.

CONTACT US

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