

Binaree[®] Tissue Clearing[™] Kit

The intact tissue clearing kit without the dedicated equipment



The adaptive one solution for multiple tissue types and immuno-staining.



Highlights

- Do the multiple-purpose tissue clearing with HRTC-012 and Mounting Solution: various tissue types and immuno-staining.
- Improve clearing speed for the immuno-staining: HRTC-012 is faster than the previous HRTI product in the clearing process for immuno-staining. e.g., 1mm depth sample, the previous HRTI product takes 6 days, but the new HRTC-012 takes 1 day.



Simple

- Simple clearing process



Intact

- Preservation of cell structure



Non Harmful

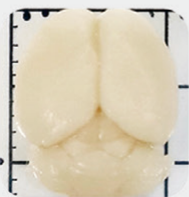
- No organic solvent based solution



Reproducible

- Easy to control without the dedicated equipment

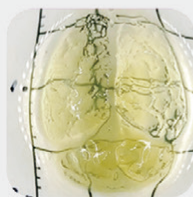
3D analysis for the deep tissue sample without slide section



Deep tissue sample



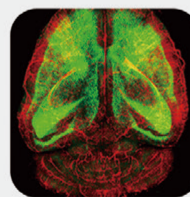
Tissue Clearing & ImmunoStaining



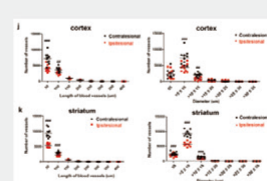
Cleared sample



Imaging



3D deconvolution



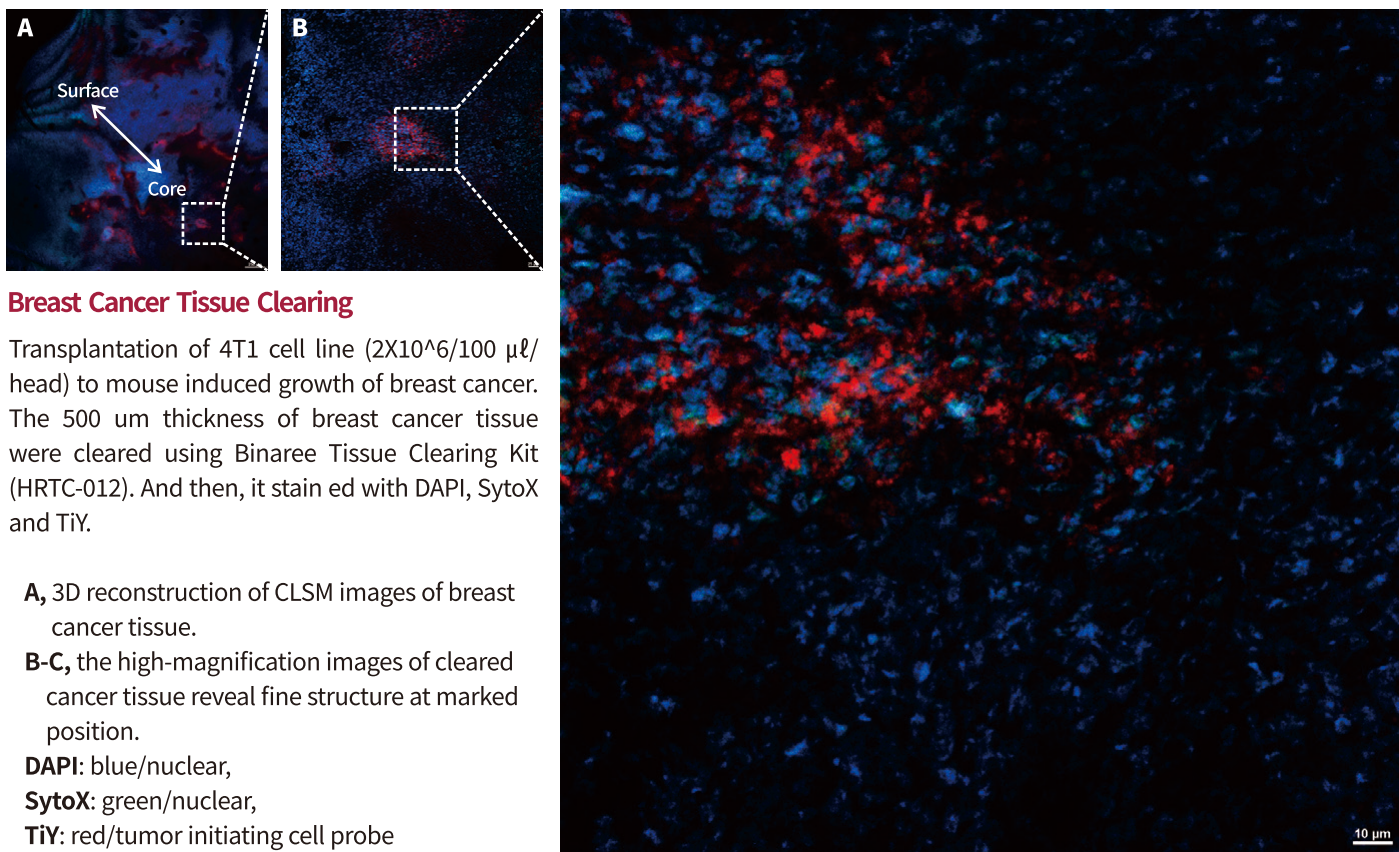
Quantitative analysis with location information

Workflow with Binaree Tissue Clearing Kit (High Resolution, Multi purpose)



Mounting Solution HRMO-006

- After clearing, perform the standard immunostaining procedure.
- Perform permeabilization step (Triton, NP40, Tween 20, DMSO, and etc.)
- Stain with primary antibody, wash, and stain with secondary antibody.



Breast Cancer Tissue Clearing

Transplantation of 4T1 cell line ($2 \times 10^6 / 100 \mu\text{l}$ / head) to mouse induced growth of breast cancer. The 500 μm thickness of breast cancer tissue were cleared using Binaree Tissue Clearing Kit (HRTC-012). And then, it stained with DAPI, SytoX and TiY.

A, 3D reconstruction of CLSM images of breast cancer tissue.

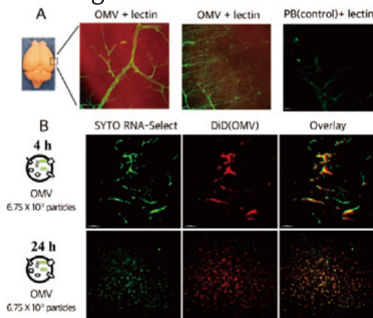
B-C, the high-magnification images of cleared cancer tissue reveal fine structure at marked position.

DAPI: blue/nuclear,

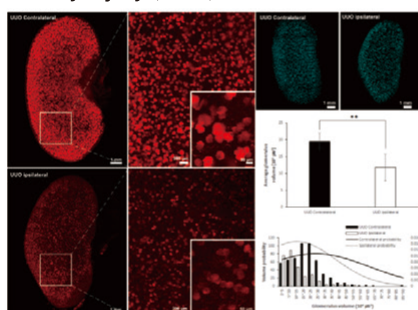
SytoX: green/nuclear,

TiY: red/tumor initiating cell probe

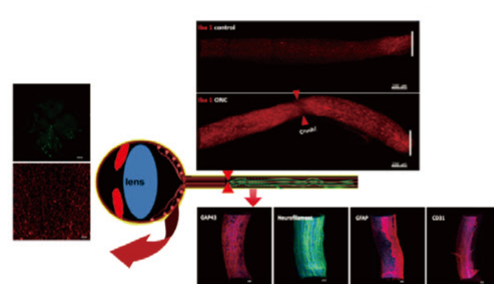
Crossing the Blood-Brain Barrier



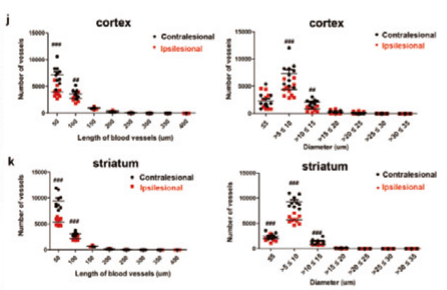
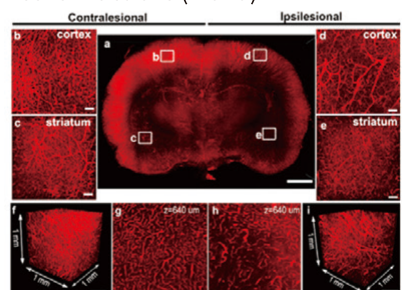
Kidney injury (UUO)



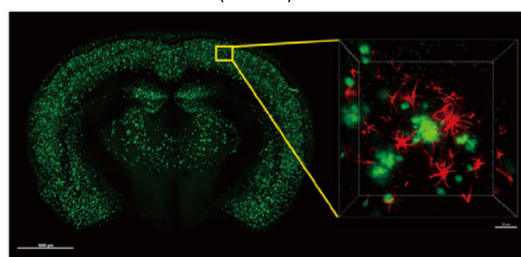
Optic nerve crush



Ischemic stroke (MCAO)



Alzheimer's disease (5xFAD)



Catalog number & components

HRTC-012 Binaree® Tissue Clearing™ Kit

Tissue Clearing Solution A 30 ml, Tissue Clearing Solution B 60 ml

HRMO-006 Binaree® Tissue Clearing™ Mounting Solution

Mounting Solution 60 ml

Sales and Service Contacts

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