

FluoTissue[®] Prepared Slide

A ready-to-use tissue slide for ideal 3D deep-imaging

- ✧ maximized signal to noise ratio
- ✧ minimized spherical aberrations

INTRODUCTION

FluoTissue[®] prepared slide contains a 550 μ m fixed tissue section cleared in RapiClear[®] 1.52 reagent (Cat. no. RC152001/RC152002) and mounted in iSpacer[®] microchamber. RapiClear[®] 1.52 is an aqueous tissue clearing reagent not only can highly preserve tissue components, but matches the refractive indices of fixed tissue section to that of immersion oil and glass coverslips (1.52nD) to minimize both light scattering and spherical aberrations. Each section multi-labeled with fluorescent dyes is especially useful for confocal microscopy to create stunningly high-quality images and reconstruct 3D models in sub-micrometer-scale resolution.

PS001 contains a mouse kidney section stained with Alexa Fluor[®] 488 labels the blood vessels, Alexa Fluor[®] 647 anti-TUJ1 antibody mainly labels the nervous system, and SYTOX[®] Orange labels the nuclei (Fig. a-c).

PS002 contains a mouse intestine section stained with Alexa Fluor[®] 488 labels the blood vessels, Alexa Fluor[®] 647 anti-LYVE1 antibody mainly labels the lymphatic vessels, and SYTOX[®] Orange labels the nuclei (Fig. d-f).

PS003 contains a mouse brain section stained with Alexa Fluor[®] 488 labels the blood vessels, Alexa Fluor[®] 647 anti-TH antibody mainly labels the dopaminergic neurons, and SYTOX[®] Orange labels the nuclei (Fig. g and h).

PS004 contains a mouse liver section stained with Alexa Fluor[®] 488 labels the blood vessels, Alexa Fluor[®] 647 anti-TUJ1 antibody mainly labels the nervous system, and SYTOX[®] Orange labels the nuclei (Fig. i-k).

Spectral characteristics of the dyes labeled in FluoTissue[®] prepared slide.

Dyes	Excitation max.	Emission max.
Alexa Fluor [®] 488	490 nm	525 nm
SYTOX [®] Orange	547 nm	570 nm
Alexa Fluor [®] 647	650 nm	665 nm

OPERATION

Image acquisition should have filter and laser settings appropriate for the dyes. Proper objective lens, exposure time and gain/offset settings differ with the instrument used and need to be determined empirically. User should minimize light exposure to avoid dyes photobleaching.

STORAGE

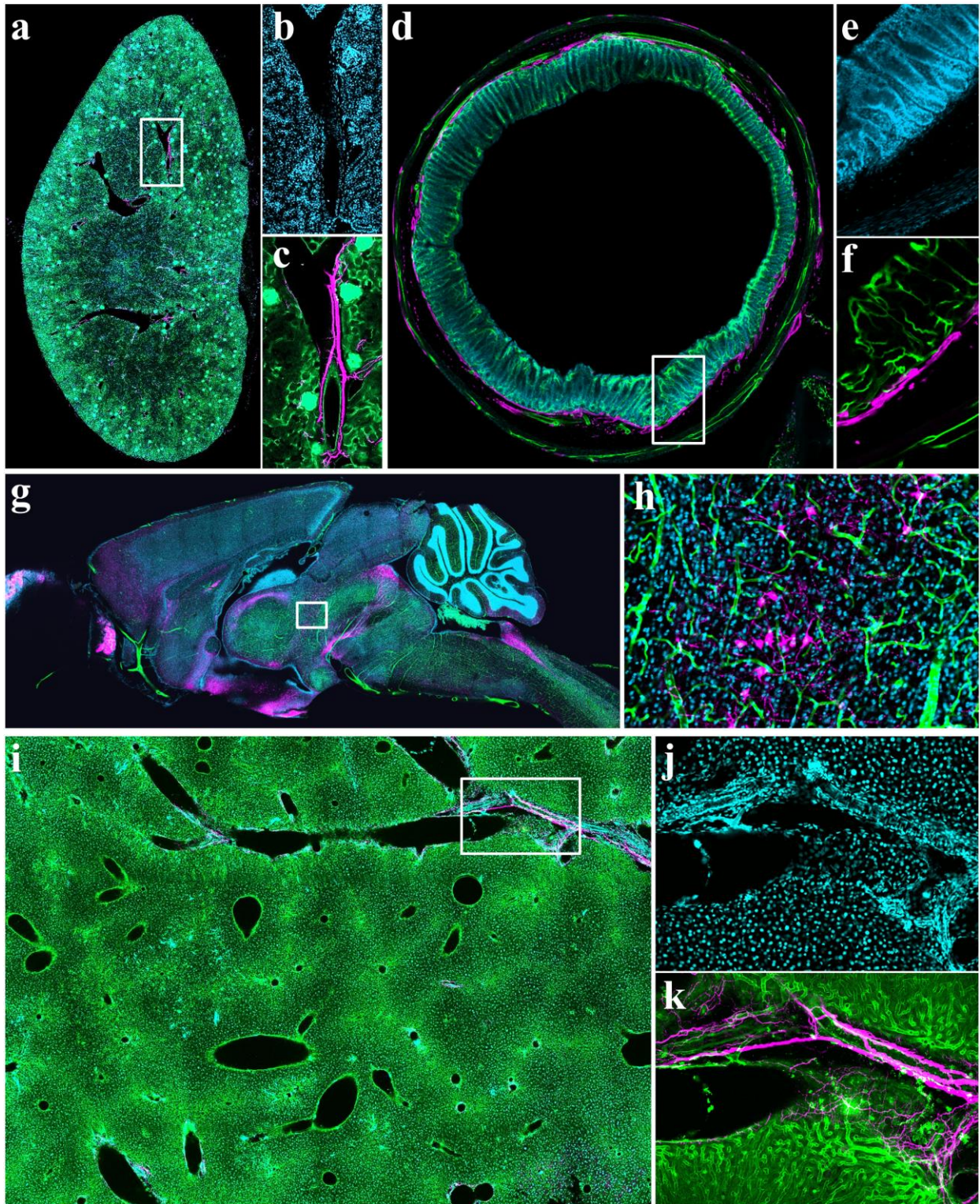
Store at 4°C and protect from light. When stored properly, these permanently mounted specimens retain their bright, specific staining patterns for at least one year from the date of purchase. Short-term exposure to room lighting will not cause damage.

SHIPPING

Room temperature

MANUFACTURER

SunJin Lab Co., Taiwan, R.O.C.



Images show the mouse tissue sections stained with wheat germ agglutinin labels the blood vessels in green and SYTOX® Orange labels the nuclei in cyan. Anti-TUJ1 antibody mainly labels the nervous system, anti-LYVE1 antibody labels the lymphatic vessels, or anti-tyrosine hydroxylase antibody mainly labels the dopaminergic neurons in magenta. a-c, kidney; d-f, intestine; g and h, brain; i-k, liver. b and c, enlarged images of the framed region on a; e and f, enlarged images of the framed region on d; h, enlarged image of the framed region on g; j and k, enlarged images of the framed region on i.