

# SHIELD

Exceptional Protection of Fluorescent Proteins and Endogenous Molecular Information



## THE SOLUTION:

**Versatile:** Safeguards endogenous fluorescence, protein antigenicity, nucleic acids, and overall tissue architecture. Synergizes with a range of existing tissue processing approaches including SWITCH (CELL, 2015) and MAP (NBT, 2016).

**Easy & Reliable:** Superior tissue preservation vs. CLARITY, without the variability of hydrogel embedding. Compatible with both non-fixed and PFA-fixed tissues.

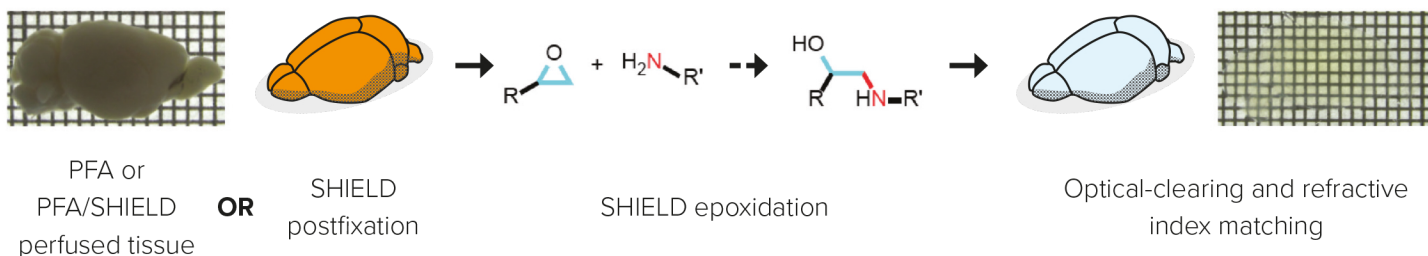
**Fast:** Streamlined protocol preserves samples in a matter of days with minimal steps.

**Multi-round imaging & staining:** Protects tissue during FP-imaging and antibody labeling across multiple individual rounds.

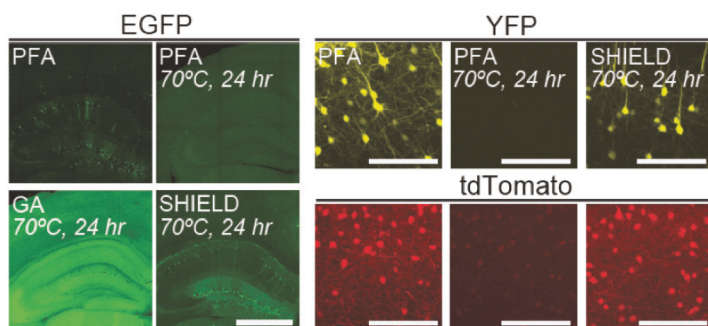
## Available in 250mL and 500mL kits:

Each kit comes with enough SHIELD Epoxy, SHIELD Buffer, and SHIELD ON solution to preserve 8 (250 mL kit) or 16 (500 mL kit) mouse brains or samples of similar size.

## SHIELD WORKFLOW: EFFECTIVE FOR BOTH UN-FIXED AND FIXED TISSUES

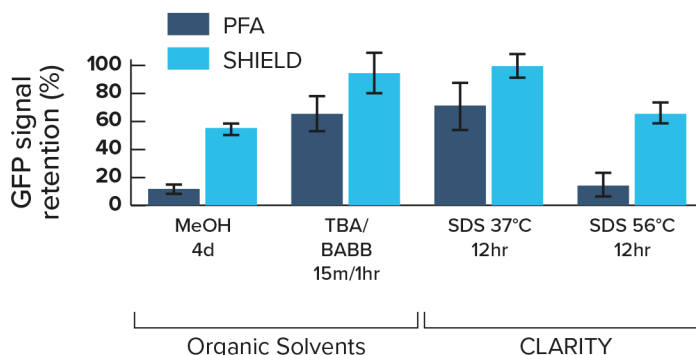


## Superior preservation of the most popular FPs

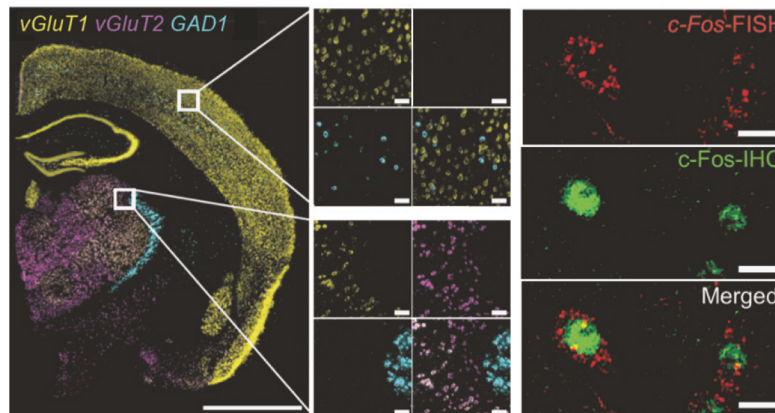


Images & data from Park et al. 2018, Nature Biotech.

## Improves signal in both CLARITY & organic solvent processed tissues

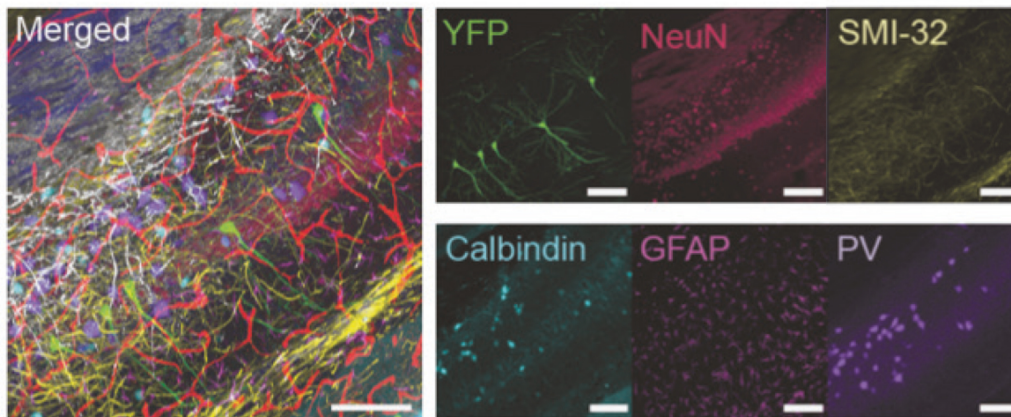


## Enables robust fluorescence in situ hybridization & immunohistochemistry



Images & data from Park et al. 2018, Nature Biotech.

## Facilitates antibody multiplexing across rounds



Images & data from Park et al. 2018, Nature Biotech.

## Guiding Through **Every Step** of the Sample's Journey

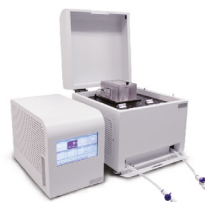
### TISSUE PRESERVATION



#### SHIELD

Experimental design support for tissue preservation ensuring maximum protection of FP and biomolecular information

### ACTIVE 3D CLEARING



#### SMARTCLEAR II PRO

Batch clearing with maximum preservation of FP and protection of tissue sample

### ACTIVE 3D LABELING



#### SMARTLABEL

Rapid immunostaining with unparalleled uniformity