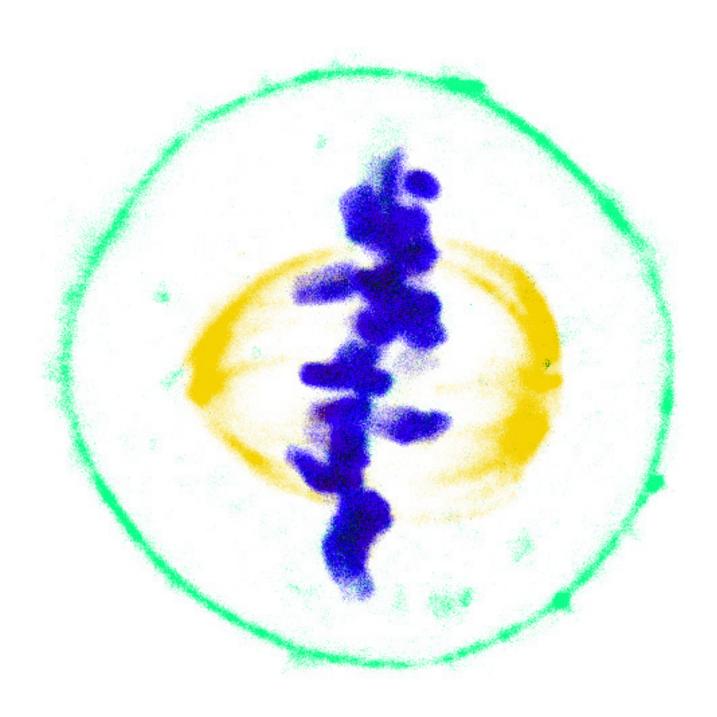


# Live Cell Imaging Reimagined

Simple, Specific, Spectacular



## MemGlow™ Fluorogenic Probes

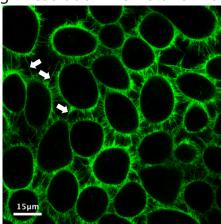
### A Breakthrough In Membrane Visualization

MemGlow<sup>™</sup> is a fluorescent membrane probe, designed for advanced cellular imaging. The MemGlow<sup>™</sup> product line consists of bright & non-toxic live cell membrane probes which are part of the MEMBRIGHT<sup>™</sup> family of probes. MemGlow<sup>™</sup> fluorogenic probes exhibit ideal microscopy characteristics including high specificity, low background, and simple application. MemGlow<sup>™</sup> has been validated with multiple microscopy techniques including epifluorescent (widefield), confocal, stimulated emission depletion (STED), 2-photon, TIRF, stochastic optical reconstruction microscopy (STORM), direct STORM (dSTORM), and 3D STORM.

### Features and advantages of MemGlow™ probes:

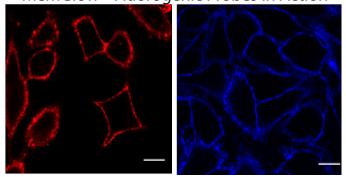
- Bright: efficient labeling of filopodia and nanotube at nanomolar concentrations
- Fluorogenic: Utilize cyanine or BODIPY dyes with zwitterionic membrane anchor groups
- Non-toxic: does not alter biological sample, while permitting long-term imaging
- Simple staining protocol: compatible with live cells and tissue

#### High Resolution Membrane Imaging



The plasma membrane of live KB cells labeled with 20 nM MemGlow™ 488 and imaged with laser scanning confocal microscopy. Intercellular filopodia and nanotubes are visible between cells throughout (white arrows). Image provided courtesy of Mayeul Collot et al, CNRS, Paris, France.

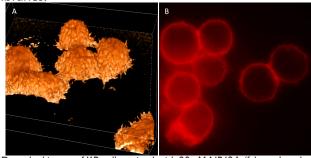
#### MemGlow™ Fluorogenic Probes in Action



The plasma membrane of live KB cells was labeled with 20 nM of MemGlow<sup> $\infty$ </sup> 488 and MemGlow<sup> $\infty$ </sup> 640. Scale bar represents 15  $\mu$ m. Images provided courtesy of Mayeul Collot et al. CNRS, Paris, France.

### New MemGlow™ Membrane Polarity Probes

MemGlow NR Polarity Probes are solvatochromic photostable plasma membrane-targeting dyes. Upon binding with a plasma membrane in a predominant liquid ordered ( $L_o$ ) phase these probes exhibit a 45-50 nm wavelength shift relative to liquid disordered ( $L_d$ ) phase enabling investigators to examine the nanoscale distribution of local chemical polarity in plasma membranes.



A) A 3D stacked image of KB cells stained with 20 nM NR12A (false colored orange). B) Widefield fluorescent imaging of live HeLa SI cells labeled with 10 nM NR12A. HeLa SI cells were imaged with a TRITC filter set, neutral density filter, a digital CCD camera, and 100x oil objective (false colored red).

# Cytoskeleton's Selection of MemGlow™ Membrane Polarity Probes members of the MEMBRIGHT™ Family of probes

Product	Amount	Cat.#	Filter
MemGlow™ NR4A Membrane Polarity Probe	4 nmol	MG06	CY 3.5
MemGlow™ NR12A Membrane Polarity Probe	4 nmol	MG07	CY 3.5
MemGlow™ NR12 S Membrane Polarity Probe	4 nmol	MG08	CY3.5

MEMBRIGHT™ is a trademark of CNRS/UNISTRA of France

## Cytoskeleton's Selection of MemGlow™ Probes members of the MEMBRIGHT™ Family of probes

Product	Amount	Cat.#	Filter
MemGlow™ 488 Fluorogenic Membrane Probe	2 nmol 10 nmol	MG01-02 MG01-10	FITC
MemGlow™ 560 Fluorogenic Membrane Probe	2 nmol 10 nmol	MG02-02 MG02-10	CY3/TRITC
MemGlow™ 590 Fluorogenic Membrane Probe	2 nmol 10 nmol	MG03-02 MG03-10	CY3.5/ TRITC
MemGlow™ 640 Fluorogenic Membrane Probe	2 nmol 10 nmol	MG04-02 MG04-10	CY5
MemGlow™ 700 Fluorogenic Membrane Probe	2 nmol 10 nmol	MG05-02 MG05-10	CY5.5

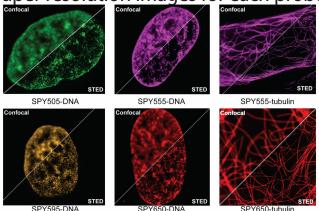
MEMBRIGHT™ is a trademark of CNRS/UNISTRA of France

## SPY™ Live Cell Imaging Probes

### Superior Live Cell Imaging Tools: For F-Actin, Microtubules, and DNA

In 2015, Cytoskeleton introduced multiple live cell imaging probes from Spirochrome Ltd. These revolutionary probes simplified and streamlined live cell imaging. Cytoskeleton is excited to introduce the next generation of Spirochrome's live cell imaging probes - the SPY $^{\text{TM}}$  probes. SPY $^{\text{TM}}$  probes improve upon the SiR and SiR700 live cell imaging probes in the far-red channels while also expanding the fluorophore labeling options for the study of F-actin, microtubules, and DNA in living cells.

# Compare Confocal vs STED high fidelity super resolution images for each probe

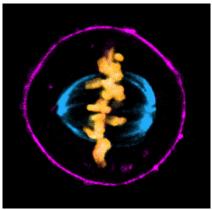


Comparison of SPY™-labeled HeLa cells imaged with confocal vs. STED microscopy. Imaged with 93X objective and provided courtesy of Spirochrome.

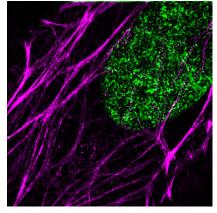
### Spirochrome's SPY™ probes Advantages:

- Increased cell membrane permeability
- Verapamil no longer needed for consistent staining
- Improved compatibility across more cell lines
- Less cytotoxic than SiR probes
- Increased spectra range: FITC, TRITC, and Texas Red

### SPY™ probes: Simplifies Combinatorial Imaging



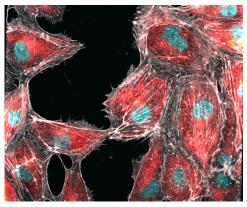
93X STED-imaged Dividing HeLa cell labeled with SPY555-actin (magenta), SPY595-DNA (orange), and SPY650-tubulin (blue). Image provided courtesy of Spirochrome.



93X STED-imaged HeLa cell labeled with SPY505-DNA (green) and SPY555-actin (magenta). Image provided courtesy of Spirochrome.

## Live cell F-actin imaging 2.0 SPY-Fast Act™

SPY650-FastAct<sup>™</sup> is a new and unique fluorescent live cell actin probe. It labels very dynamic actin filaments.



HUVEC cells stained with SPY650-FastAct, SPY555-Tubulin, and SPY505-DNA

### Cytoskeleton's Selection of SPY™ FastAct™ Dynamic Actin Probes

Product	Ex/Em	Amount	Cat.#
SPY555-FastAct™	555 / 580 nm	100 stains	CY-SC205
SPY650-FastAct™	652 / 674 nm	100 stains	CY-SC505

### Cytoskeleton's Selection of SPY™ Probes

-/			
Product	Ex/Em	Amount	Cat #
SPY505-DNA Includes SPY505-DNA Probe	512 / 531 nm	100 stains	CY-SC101
SPY555-DNA Includes SPY555-DNA Probe	555 / 580 nm	100 stains	CY-SC201
SPY555-Actin Includes SPY555-Actin Probe	555 / 580 nm	100 stains	CY-SC202
SPY555-Tubulin Includes SPY555-Tubulin Probe	555 / 580 nm	100 stains	CY-SC203
SPY595-DNA Includes SPY595-DNA Probe	599 / 615 nm	100 stains	CY-SC301
SPY620-Actin Includes SPY555-Actin Probe	619 / 636 nm	100 stains	CY-SC402
SPY650-DNA Includes SPY650-DNA Probe	652 / 674 nm	100 stains	CY-SC501
SPY650-Tubulin Includes SPY650-Tubulin Probe	652 / 674 nm	100 stains	CY-SC503
SPY700-DNA Includes SPY700-DNA Probe	696 / 718 nm	100 stains	CY-SC601

#### Ordering information for USA:

Online - cytoskeleton.com Phone - 303.322.2254

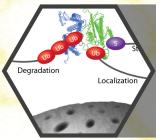
Fax - 303.322.2257

Cytoskeleton, Inc. 1830 S. Acoma St.,

Denver, CO 80223, USA.

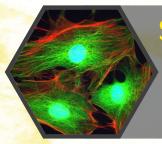
**International Customers** 

Locate your nearest distributor at: cytoskeleton.com/distributors



## Signal-Seeker<sup>™</sup> Ubiquitin Tools

- Mono-/Poly-Ubiquitination Detection Kit
- Mono-/Poly-Ubiquitination Affinity Beads
- Ubiquitin Antibody-HRP labeled



## Signal-Seeker<sup>™</sup> Acetyl-lysine Tools

- Acetyl-lysine Detection Kit
- Acetyl-lysine Affinity Beads
- Acetyl-lysine IF and HRP labeled Antibodies



### Comprehensive Technical Support

Expert Guidance from our team of Scientists

Support from the experts as you explore these
new probes - we're only a call away



Please Recycle

cytoskeleton.com