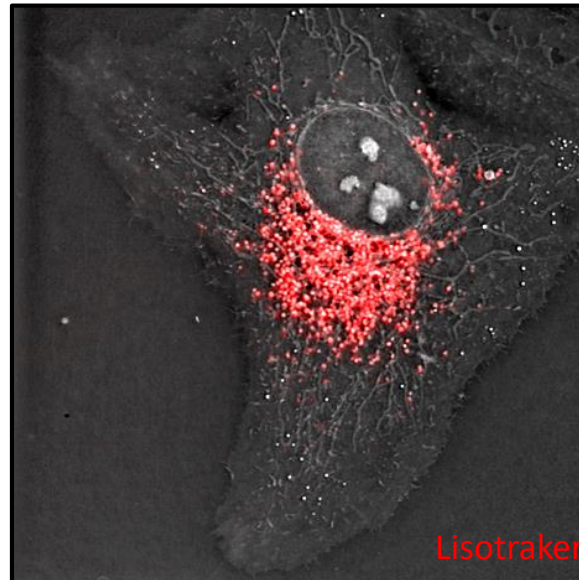
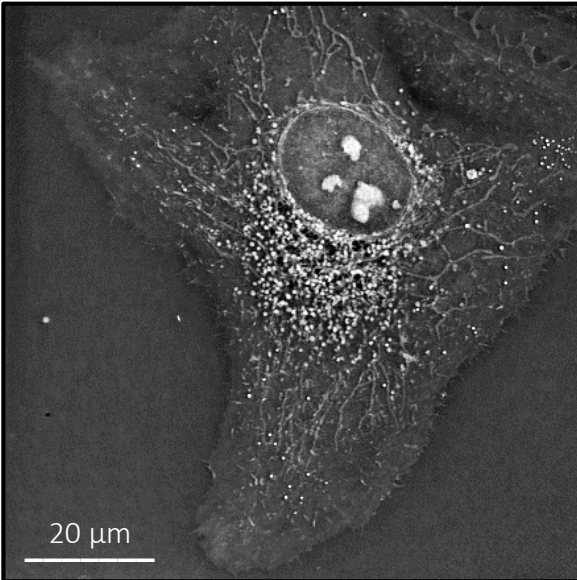
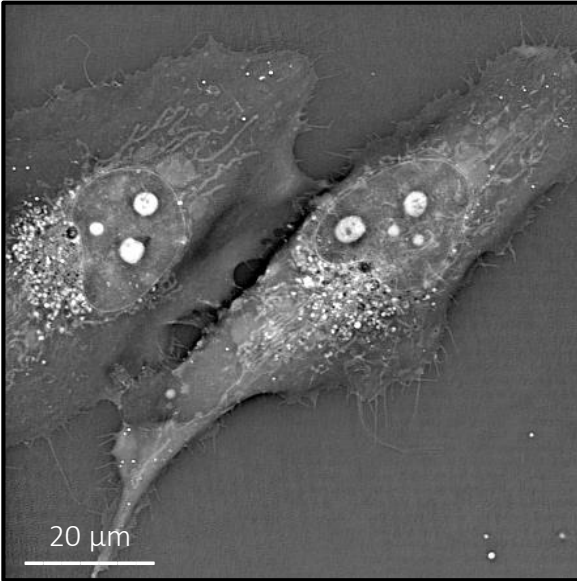


3D Cell Explorer *fluo* – FLUORESCENCE MODULE

1. Available configuration options
2. Excitation Filters
3. Emitter Filter
4. Fluorophores





Available configuration options:

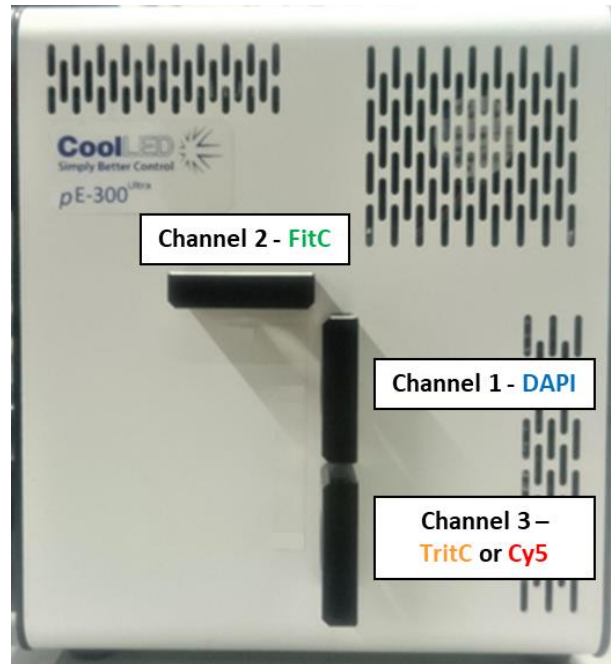
- **DAPI configuration:** DAPI + FITC + TRITC
- **Live Cell Imaging configuration:** FITC + TRITC + Cy5
- **All-in-one configuration*:** DAPI + FITC + TRITC/Cy5

*TritC and Cy5 excitation filters are exchangeable on channel 3

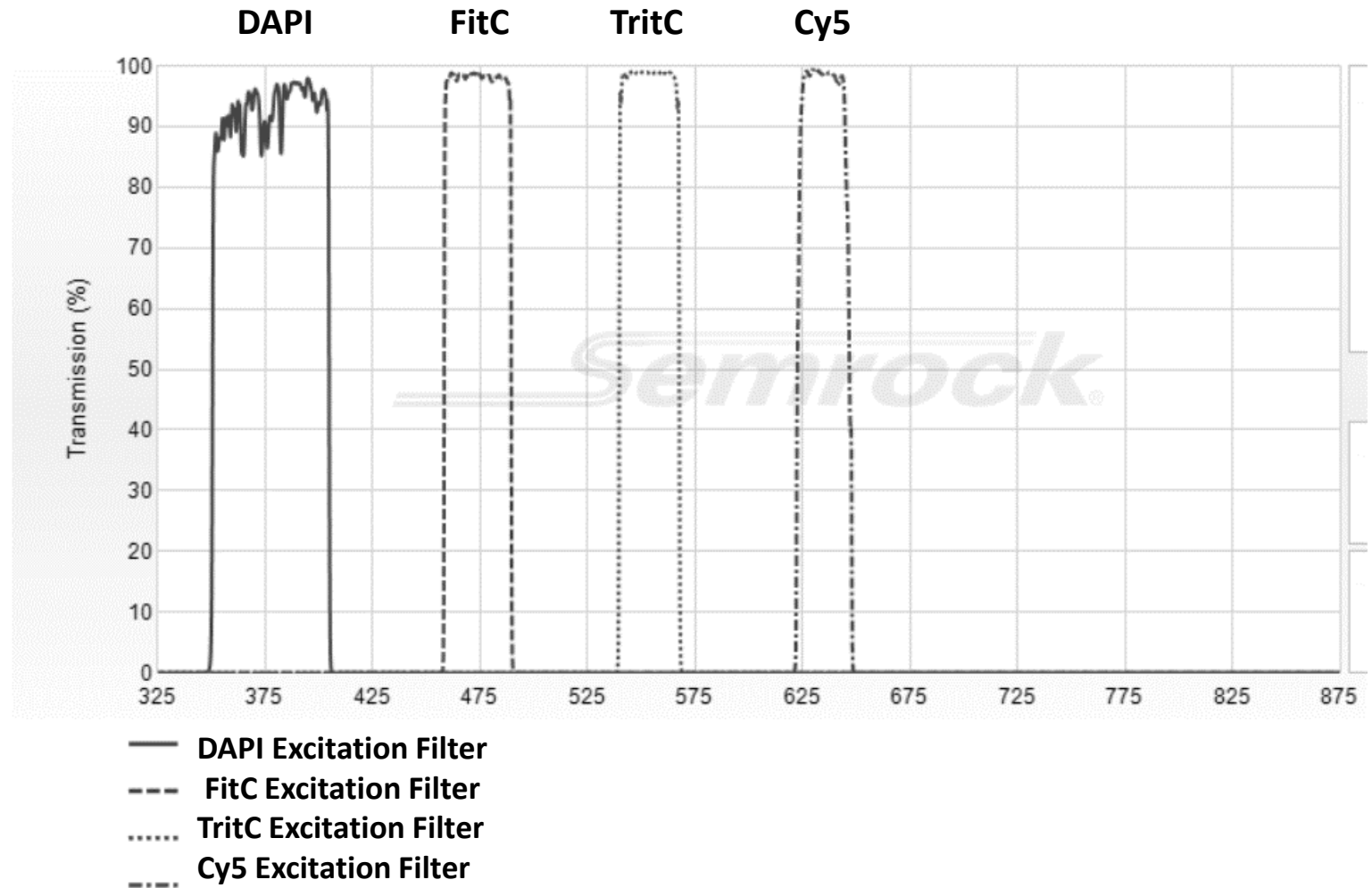


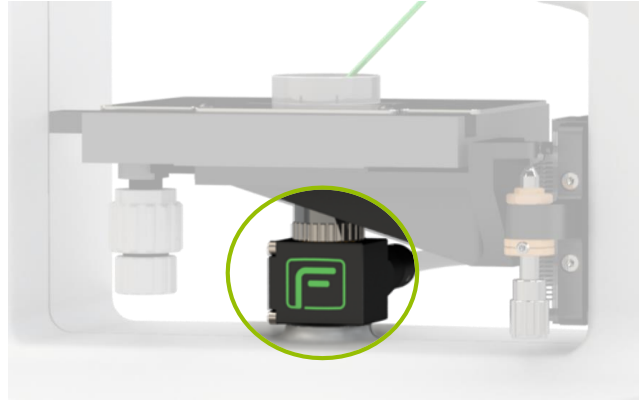
LED illumination benefits:

- Compatible with all the common fluorescent stains
- Instant on/off - No warm up or cool down
- Stable & repeatable – reliable and consistent results
- Intensity control in 1% steps (0-100%)
- Long lifetime – 25,000 hours
- Individual channel triggering in microseconds

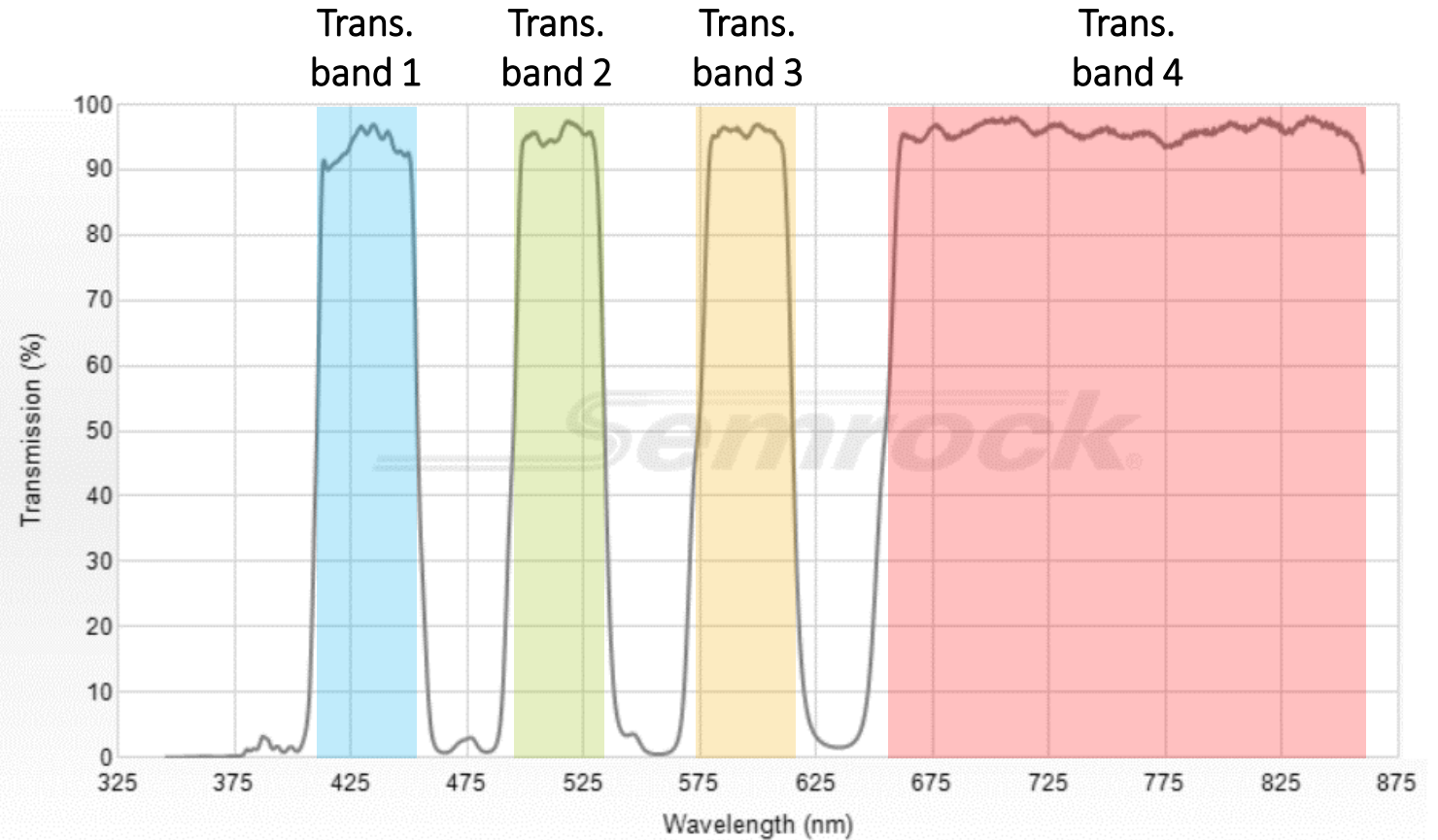


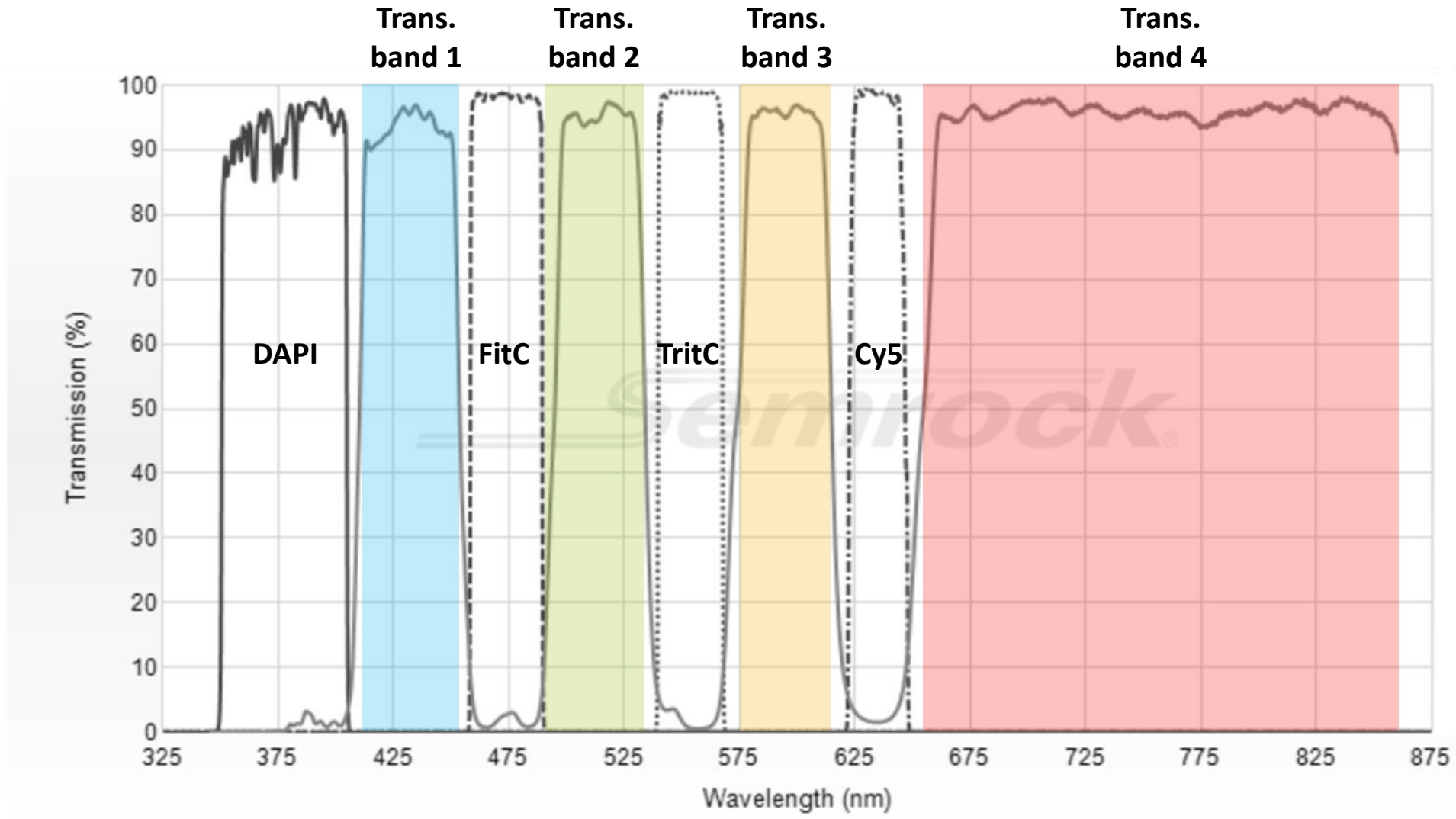
Channel	Central λ (nm)	Width (nm)
DAPI	378	52
FitC	474.3	26.5
TritC	554.5	23
Cy5	635	18





Specification	Value
Transmission Band 1	T _{avg} > 93% 414 - 450 nm
Center Wavelength 1	432 nm
Guaranteed Minimum Bandwidth 1	36 nm
FWHM Bandwidth 1 (nominal)	39.7 nm
Transmission Band 2	T _{avg} > 93% 499.5 - 530 nm
Center Wavelength 2	514.8 nm
Guaranteed Minimum Bandwidth 2	30.5 nm
FWHM Bandwidth 2 (nominal)	35.5 nm
Transmission Band 3	T _{avg} > 93% 580 - 611 nm
Center Wavelength 3	595.5 nm
Guaranteed Minimum Bandwidth 3	31 nm
FWHM Bandwidth 3 (nominal)	36.2 nm
Transmission Band 4	T _{avg} > 93% 661 - 800 nm
Center Wavelength 4	730.5 nm
Guaranteed Minimum Bandwidth 4	139 nm
FWHM Bandwidth 4 (nominal)	147.2 nm





More info: <https://www.semrock.com/SetDetails.aspx?id=3677>

Blue and Green

The 3D Cell Explorer fluo filter set is optimized for some fluorophores, check the complete list.

- ★★★★★ Optimized – Filter set is specifically optimized for that fluorophore.
- ★★★ Compatible – Should result in nearly ideal performance in most situations.
- ★ Acceptable – Actual performance is dependent on specific experimental conditions.

We recommend to image at least 3 star fluorophores.

Blue	
Fluorophore	Compatibility
Alexa Fluor® 405	★★★★★
BD Horizon V450	★★★★
BFP (EBFP)	★★★★★
Cascade Blue™	★★★★★
CellTrace calcein violet	★★★
DAPI	★★★★★
DyLight 405	★★★★★
HiLyte Fluor™ 405	★★★★★
LIVE-DEAD Fixable Violet Dead Cell Stain	★★★
LysoSensor Blue	★★★★
Marina Blue	★★★
Pacific Blue™	★★★
sgBFP™	★★★★★
SpectrumBlue	★★★★
TagBFP	★★★
Vybrant DyeCycle Violet	★★★

Green	
Fluorophore	Compatibility
5-FAM (5-carboxyfluorescein)	★★★
Acridine Orange (+DNA)	★★★
Acridine Yellow	★★★
Alexa Fluor® 430	★★★
Alexa Fluor® 488	★★★★★
Alexa Fluor® 500	★★★
AmCyan1	★★★
ATTO 165	★★★
ATTO 488	★★★★★
ATTO 495	★★★
BOBO™-1	★★★
BODIPY FL	★★★
BODIPY FL-MeOH	★★★
Calcein	★★★
CFP2	★★★★★
Cy2™	★★★★★
CyQUANT GR-DNA	★★★
DAF-FM-NO	★★★
Dendra2 (Green)	★★★★★
DiO	★★★★★
Dronpa	★★★
DY-505-Phalloidin	★★★
ecliptic pFluorin pH5.5	★★★★★
Emerald	★★★
evoglow-Bs1	★★★
FITC (Fluorescein)	★★★★★
Fluo-4	★★★
Fluorescein dextran	★★★
Fluorescein-pH 8.0	★★★
Fluoro-Emerald	★★★
FluoSpheres Yellow-Green fluorescent microspheres	★★★
GFP (EGFP)	★★★★★
Green 496	★★★
Green 500	★★★
HiLyte Fluor™ 488	★★★
LIVE-DEAD Fixable Green Dead Cell Stain	★★★
LysoSensor Green	★★★
LysoTracker Green	★★★

LysoTracker Yellow HCK-123	★★★
mHoneyDew	★★★
MitoTracker™ Green	★★★★★
mTFP1	★★★
mWasabi	★★★★★
NBD-X (MeOH)	★★★
NeuroTrace 500/525 Green Fluorescent Nissl Stain	★★★
Oregon Green™ 488	★★★
PicoGreen®	★★★
PKH67	★★★★★
Qdot® 525 Nanocrystals	★★★
Rhodamine 110	★★★
Rhodamine Green	★★★
Rhodol Green	★★★
sgGFP™ (super glow GFP)	★★★★★
Sodium Green	★★★
SpectrumGreen	★★★
SYBR Gold nucleic acid gel stain-DNA	★★★
SYBR Green I nucleic acid gel stain-DNA	★★★
SYBR Safe DNA gel stain-DNA	★★★
SYTO 11	★★★
SYTO 13	★★★★
SYTO 16	★★★★★
SYTO 9	★★★★★
SYTO RNASelect geen fluorescent cell stain	★★★
SYTOX Green-DNA	★★★
TagCFP	★★★
TOTO-1	★★★
TurboGFP	★★★★★
wtGFP (wild type GFP, non-UV excitation)	★★★★★
YO-PRO-1	★★★
YOYO-1	★★★

Orange and Red

Orange	
Fluorophore	Compatibility
2-dodecylresorufin-lipid	☆☆☆
5-ROX (carboxy-X-rhodamine)	☆☆
5-TAMRA (5-carboxytetramethylrhodamine, pH 7.0)	☆☆☆
Alexa Fluor® 546	☆☆☆
Alexa Fluor® 555	☆☆
Alexa Fluor® 568	☆☆☆
Amplex UltraRed peroxidation product (pH 7.5)	☆☆☆
AsRed 2	☆☆
ATTO 550	☆☆☆
ATTO 565	☆☆☆☆
BOBO™-3	☆☆☆
BODIPY TMR-X	☆☆
BODIPY TR-X (MeOH)	☆☆
Calcium Crimson	☆☆
Calcium Orange	☆☆☆
CellTracker Red CMTPX	☆☆
Cy3.5™	☆☆
Cy3™	☆☆
Dendra2 (Red)	☆☆
Dil	☆☆
DsRed	☆☆☆☆
DsRed-Express	☆☆☆☆
dTomato	☆☆☆☆
DY-590	☆☆
Ethidium bromide	☆☆
Ethidium homodimer	☆☆
FluoSpheres Red fluorescent microspheres	☆☆
Gold 550	☆☆
HCS LipidTOX Red neutral lipid stain	☆☆
HCS LipidTOX Red phospholipidosis	☆☆
HiLyte Fluor™ 555	☆☆
KFP-Red	☆☆
LOLO-1	☆☆☆

LysoTracker Red	☆☆
Magnesium Orange	☆☆☆
mApple	☆☆☆☆
mCherry	☆☆
Mercocyanine 540	☆☆☆
MitoTracker™ Orange	☆☆☆
MitoTracker™ Red	☆☆
mOrange	☆☆
mRFP	☆☆☆☆
mRFP1	☆☆
mRuby	☆☆☆☆
mStrawberry	☆☆
mTangerine	☆☆☆☆
Nile red-triglyceride	☆☆
OFP	☆☆
pHrodo™, succinimidyl ester	☆☆☆☆
POPO-3	☆☆
PO-PRO-3	☆☆
Propidium iodide (PI)	☆☆
Pro-Q Diamond	☆☆☆☆
Qdot® 585 Nanocrystals	☆☆
Qdot® 605 Nanocrystals	☆☆
ReAsH-CCPGCC	☆☆
Red 580	☆☆
Resorufin	☆☆☆
Rhod-2	☆☆☆
Rhodamine phalloidin	☆☆☆
Rhodamine Red-X	☆☆
R-phycoerythrin (PE)	☆☆☆
SNARF-1 488nm (ph 6.0)	☆☆☆☆
SNARF-1 488nm (ph 9.0)	☆☆
SNARF-1 514nm (ph 6.0)	☆☆☆☆
SpectrumOrange	☆☆☆☆
Sulforhodamine 101-ETOH	☆☆
SYTO 82	☆☆
SYTOX Orange	☆☆
Tetramethylrhodamine dextran	☆☆☆☆
Texas Red DHPE	☆☆
TRITC (Tetramethylrhodamine)	☆☆☆☆
TurboRFP	☆☆
X-Rhod-1 Indicator	☆☆

Red	
Fluorophore	Compatibility
5-carboxynaphthofluorescein (pH 10)	☆☆
Alexa Fluor® 633	☆☆☆
Alexa Fluor® 647	☆☆☆☆
Alexa Fluor® 660	☆☆
Alexa Fluor® 680	☆☆
Alexa Fluor® 700	☆☆
APC	☆☆☆
APC (Allophycocyanin)	☆☆☆☆
ATTO 633	☆☆☆
ATTO 635	☆☆☆
ATTO 647	☆☆☆☆
ATTO 647N	☆☆☆
ATTO 655	☆☆
ATTO 680	☆☆
ATTO 700	☆☆
BODIPY 650/665-X	☆☆☆☆
Carboxynaphthofluorescein	☆☆
Cy5.5™	☆☆
Cy5™	☆☆☆☆
DDAO	☆☆☆☆
DiD (DiIc18(5)) - Lipophilic Tracer	☆☆☆☆
DyLight 649	☆☆☆
DyLight 680	☆☆
FluoSpheres Dark Red fluorescent microspheres	☆☆
HCS CellMask Red cytoplasmic	☆☆
HCS LipidTOX Deep Red neutral lipid stain	☆☆
HiLyte Fluor™ 647	☆☆☆☆
LDS 751	☆☆
LIVE-DEAD Fixable Far Red Dead Cell Stain	☆☆
MitoTracker™ Deep Red	☆☆☆☆
Nile blue-ETOH	☆☆☆☆
Qdot® 705 Nanocrystals	☆☆
Qdot® 800 Nanocrystals	☆☆
Quasar® 705	☆☆
Red 650	☆☆☆☆
SpectrumFRed (Far Red)	☆☆☆☆
SYTO 59	☆☆
SYTO 60	☆☆☆
SYTO 61	☆☆
SYTOX Red-DNA	☆☆☆☆
TO-PRO-3	☆☆☆
TOTO-3	☆☆☆☆