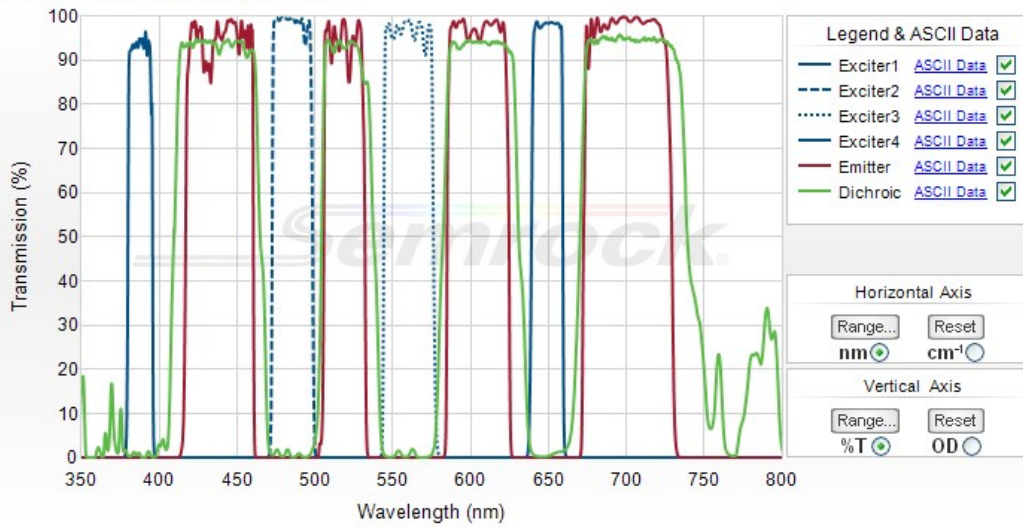


**BrightLine® Pinkel filter set, optimized for DAPI, FITC, TRITC, & Cy5 and other like fluorophores**

**Part Number: DA/FI/TR/Cy5-4X-B-000**



**Semrock, Inc**

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Rochester, New York 14624

Main Phone: +1 585.594.7050 (worldwide)  
Toll Free Phone: 866.736.7625 (866-SEMROCK)  
(within US and Canada)

**BrightLine® Pinkel filter set, optimized for DAPI, FITC, TRITC, & Cy5 and other like fluorophores**

This 6-filter "Pinkel" quad-band set is designed for sequentially imaging DAPI, FITC, TRITC, and Cy5 (and other key fluorophores – see complete list above). This state-of-the-art set represents a break-through in quad-band performance, and has been tested by independent researchers to have up to four times the brightness, twice the signal-to-noise ratio and substantially lower crosstalk than any other such quad-band filter set on the market. The complete set is comprised of a quad-band beamsplitter and a quad-band emitter (these can be offered assembled in a microscope cube), plus four "no burn-out" single-band exciters that are intended to be mounted in an exciter filter wheel or slider.



**Individual filters and filter sets (no cube):**

These filters sets contain individual filters. For filter sets already mounted in a holder/cube, scroll down to see complete mounted sets with cubes.

Part Number	Price <sup>1</sup>	Stock Status	
DA/FI/TR/Cy5-4X-B-000 (Standard size set, fits most microscopes)	\$2,045	In Stock	
<b>Filter Role</b>	<b>Filter Size</b>	<b>Part Number</b>	<b>Price<sup>1</sup></b>
Single Band Exciter	25 mm x 5.0 mm	<a href="#">FF01-387/11-25</a>	\$305
Single Band Exciter	25 mm x 5.0 mm	<a href="#">FF02-485/20-25</a>	\$305
Single Band Exciter	25 mm x 5.0 mm	<a href="#">FF01-560/25-25</a>	\$355
Single Band Exciter	25 mm x 5.0 mm	<a href="#">FF01-650/13-25</a>	\$305
Quad Band Emitter	25 mm x 3.5 mm	<a href="#">FF01-440/521/607/700-25</a>	\$495
Quad Band Dichroic	25.2 mm x 35.6 mm x 1.1 mm	<a href="#">FF410/504/582/669-Di01-25x36</a>	\$515
DA/FI/TR/Cy5-4X-B-L01 (Leica 'Large' set)	\$2,045	Contact Us	
<b>Filter Role</b>	<b>Filter Size</b>	<b>Part Number</b>	<b>Price<sup>1</sup></b>
Single Band Exciter	25 mm x 5.0 mm	<a href="#">FF01-387/11-25</a>	\$305
Single Band Exciter	25 mm x 5.0 mm	<a href="#">FF02-485/20-25</a>	\$305
Single Band Exciter	25 mm x 5.0 mm	<a href="#">FF01-560/25-25</a>	\$355
Single Band Exciter	25 mm x 5.0 mm	<a href="#">FF01-650/13-25</a>	\$305
Quad Band Emitter	23.3 mm x 2.0 mm	<a href="#">FF01-440/521/607/700-23.3-D</a>	\$495
Quad Band Dichroic	22.0 mm x 29.0 mm x 1.1 mm	<a href="#">FF410/504/582/669-Di01-22x29</a>	\$515
DA/FI/TR/Cy5-4X-B-L02 (Leica 'Small' set)	\$2,299	Contact Us	
<b>Filter Role</b>	<b>Filter Size</b>	<b>Part Number</b>	<b>Price<sup>1</sup></b>
Single Band Exciter	25 mm x 5.0 mm	<a href="#">FF01-387/11-25</a>	\$305
Single Band Exciter	25 mm x 5.0 mm	<a href="#">FF02-485/20-25</a>	\$305
Single Band Exciter	25 mm x 5.0 mm	<a href="#">FF01-560/25-25</a>	\$355
Single Band Exciter	25 mm x 5.0 mm	<a href="#">FF01-650/13-25</a>	\$305
DA/FI/TR/Cy5-4X-B-000-X32 (Standard size set, fits most microscopes)	\$2,697	Contact Us	
<b>Filter Role</b>	<b>Filter Size</b>	<b>Part Number</b>	<b>Price<sup>1</sup></b>
DA/FI/TR/Cy5-4X-B-L01-X32 (Leica 'Large' set)	\$2,697	Contact Us	
<b>Filter Role</b>	<b>Filter Size</b>	<b>Part Number</b>	<b>Price<sup>1</sup></b>

DA/FI/TR/Cy5-4X-B-L02-X32 (Leica 'Small' set) \$2,997 Contact Us

Filter Role	Filter Size	Part Number	Price <sup>1</sup>
\$2,125 Contact Us			
Filter Role	Filter Size	Part Number	Price <sup>1</sup>
Single Band Exciter	25 mm threaded ring for Sutter Lambda filter wheel	<a href="#">FF01-387/11-25-STR</a>	\$325
Single Band Exciter	25 mm threaded ring for Sutter Lambda filter wheel	<a href="#">FF02-485/20-25-STR</a>	\$325
Single Band Exciter	25 mm threaded ring for Sutter Lambda filter wheel	<a href="#">FF01-560/25-25-STR</a>	\$375
Single Band Exciter	25 mm threaded ring for Sutter Lambda filter wheel	<a href="#">FF01-650/13-25-STR</a>	\$325
Quad Band Emitter	25 mm x 3.5 mm	<a href="#">FF01-440/521/607/700-25</a>	\$495
Quad Band Dichroic	25.2 mm x 35.6 mm x 1.1 mm	<a href="#">FF410/504/582/669-Di01-25x36</a>	\$515

1) US domestic pricing only. If you are ordering from outside the US, please contact your nearest [regional distributor](#) for the correct list price.

### Complete filter sets mounted in microscope holders/cubes:

These sets are delivered already mounted in microscope filter holders, often called 'cubes', ready to be dropped into your microscope.

**Nikon Quadfluor** for microscopes: E200, E400, E600, E800, E1000, TS100, TS100F, TE200, TE300, ME600L, L150A, and some Labophot, Optiphot, and Diaphot series

DA/FI/TR/Cy5-4X-B-NQF (set mounted in cube) \$2,440 In Stock

Filter Role	Filter Size	Part Number	Price <sup>1</sup>
Single Band Exciter	25 mm x 5.0 mm	<a href="#">FF01-387/11-25</a>	\$305
Single Band Exciter	25 mm x 5.0 mm	<a href="#">FF02-485/20-25</a>	\$305
Single Band Exciter	25 mm x 5.0 mm	<a href="#">FF01-560/25-25</a>	\$355
Single Band Exciter	25 mm x 5.0 mm	<a href="#">FF01-650/13-25</a>	\$305
Quad Band Emitter	25 mm x 3.5 mm	<a href="#">FF01-440/521/607/700-25</a>	\$495
Quad Band Dichroic	25.2 mm x 35.6 mm x 1.1 mm	<a href="#">FF410/504/582/669-Di01-25x36</a>	\$515
Quadfluor cube		<a href="#">NQF</a>	\$395

DA/FI/TR/Cy5-4X-B-NQF-X32 (set mounted in cube) \$3,082 Contact Us

Filter Role	Filter Size	Part Number	Price <sup>1</sup>
Quadfluor cube		<a href="#">NQF</a>	\$395

**Nikon TE 2000** for microscopes: TE 2000, 50i, 55i, 80i, 90i, Eclipse Ti, Ni, and Ci series, and any using the Epi-fluor Illuminator

DA/FI/TR/Cy5-4X-B-NTE (set mounted in cube) \$2,440 In Stock

Filter Role	Filter Size	Part Number	Price <sup>1</sup>
Single Band Exciter	25 mm x 5.0 mm	<a href="#">FF01-387/11-25</a>	\$305
Single Band Exciter	25 mm x 5.0 mm	<a href="#">FF02-485/20-25</a>	\$305
Single Band Exciter	25 mm x 5.0 mm	<a href="#">FF01-560/25-25</a>	\$355
Single Band Exciter	25 mm x 5.0 mm	<a href="#">FF01-650/13-25</a>	\$305
Quad Band Emitter	25 mm x 3.5 mm	<a href="#">FF01-440/521/607/700-25</a>	\$495
Quad Band Dichroic	25.2 mm x 35.6 mm x 1.1 mm	<a href="#">FF410/504/582/669-Di01-25x36</a>	\$515
TE 2000 cube		<a href="#">NTE</a>	\$395

DA/FI/TR/Cy5-4X-B-NTE-X32 (set mounted in cube) \$3,082 Contact Us

Filter Role	Filter Size	Part Number	Price <sup>1</sup>
TE 2000 cube		<a href="#">NTE</a>	\$395

**Olympus U-MF2** for microscopes: AX70, BX, BX41, BX50, BX51, BX60, BX61, BX50/51WI, BX60/61WI, IX50, IX51, IX70, IX71, IX81

DA/FI/TR/Cy5-4X-B-OMF (set mounted in cube) \$2,480 In Stock

Filter Role	Filter Size	Part Number	Price <sup>1</sup>
Single Band Exciter	25 mm x 5.0 mm	<a href="#">FF01-387/11-25</a>	\$305
Single Band Exciter	25 mm x 5.0 mm	<a href="#">FF02-485/20-25</a>	\$305
Single Band Exciter	25 mm x 5.0 mm	<a href="#">FF01-560/25-25</a>	\$355
Single Band Exciter	25 mm x 5.0 mm	<a href="#">FF01-650/13-25</a>	\$305
Quad Band Emitter	25 mm x 3.5 mm	<a href="#">FF01-440/521/607/700-25</a>	\$495
Quad Band Dichroic	25.2 mm x 35.6 mm x 1.1 mm	<a href="#">FF410/504/582/669-Di01-25x36</a>	\$515
U-MF2 cube		<a href="#">OMF</a>	\$435

DA/FI/TR/Cy5-4X-B-OMF-X32 (set mounted in cube) \$3,117 Contact Us

Filter Role	Filter Size	Part Number	Price <sup>1</sup>
U-MF2 cube		<a href="#">OMF</a>	\$435

**Olympus U-FF for microscopes: BX53, BX63**

DA/FI/TR/Cy5-4X-B-OFF (set mounted in cube) \$2,480 In Stock

Filter Role	Filter Size	Part Number	Price <sup>1</sup>
Single Band Exciter	25 mm x 5.0 mm	<a href="#">FF01-387/11-25</a>	\$305
Single Band Exciter	25 mm x 5.0 mm	<a href="#">FF02-485/20-25</a>	\$305
Single Band Exciter	25 mm x 5.0 mm	<a href="#">FF01-560/25-25</a>	\$355
Single Band Exciter	25 mm x 5.0 mm	<a href="#">FF01-650/13-25</a>	\$305
Quad Band Emitter	25 mm x 3.5 mm	<a href="#">FF01-440/521/607/700-25</a>	\$495
Quad Band Dichroic	25.2 mm x 35.6 mm x 1.1 mm	<a href="#">FF410/504/582/669-Di01-25x36</a>	\$515
U-FF cube		<a href="#">OFF</a>	\$435

DA/FI/TR/Cy5-4X-B-OFF-X32 (set mounted in cube) \$3,117 Contact Us

Filter Role	Filter Size	Part Number	Price <sup>1</sup>
U-FF cube		<a href="#">OFF</a>	\$435

**Zeiss FL Cube EC P+C for microscopes: Axio Imager, AxioStar Plus, Axioskop 40, Axioskop 2 (post-2001), AxioPlan 2i, AxioPlan 2ie, Axiovert 200, Axiovert 40, Axio Observer, Axio Examiner and Axio Scope A1**

DA/FI/TR/Cy5-4X-B-ZHE (set mounted in cube) \$2,320 In Stock

Filter Role	Filter Size	Part Number	Price <sup>1</sup>
Single Band Exciter	25 mm x 5.0 mm	<a href="#">FF01-387/11-25</a>	\$305
Single Band Exciter	25 mm x 5.0 mm	<a href="#">FF02-485/20-25</a>	\$305
Single Band Exciter	25 mm x 5.0 mm	<a href="#">FF01-560/25-25</a>	\$355
Single Band Exciter	25 mm x 5.0 mm	<a href="#">FF01-650/13-25</a>	\$305
Quad Band Emitter	25 mm x 3.5 mm	<a href="#">FF01-440/521/607/700-25</a>	\$495
Quad Band Dichroic	25.2 mm x 35.6 mm x 1.1 mm	<a href="#">FF410/504/582/669-Di01-25x36</a>	\$515
FL Cube EC P+C cube		<a href="#">ZHE</a>	\$275

DA/FI/TR/Cy5-4X-B-ZHE-X32 (set mounted in cube) \$3,022 Contact Us

Filter Role	Filter Size	Part Number	Price <sup>1</sup>
FL Cube EC P+C cube		<a href="#">ZHE</a>	\$275

**Leica DM-K for microscopes: DM-2000, DM-2500, DM-3000, DMI3000 B, DM-4000, DMI4000 B, DM-5000, DM-5500, and DM-6000, DMI6000 B**

DA/FI/TR/Cy5-4X-B-LDMK (set mounted in cube) \$2,395 Contact Us

Filter Role	Filter Size	Part Number	Price <sup>1</sup>
Single Band Exciter	25 mm x 5.0 mm	<a href="#">FF01-387/11-25</a>	\$305
Single Band Exciter	25 mm x 5.0 mm	<a href="#">FF02-485/20-25</a>	\$305
Single Band Exciter	25 mm x 5.0 mm	<a href="#">FF01-560/25-25</a>	\$355
Single Band Exciter	25 mm x 5.0 mm	<a href="#">FF01-650/13-25</a>	\$305
Quad Band Emitter	23.3 mm x 2.0 mm	<a href="#">FF01-440/521/607/700-23.3-D</a>	\$495
Quad Band Dichroic	22.0 mm x 29.0 mm x 1.1 mm	<a href="#">FF410/504/582/669-Di01-22x29</a>	\$515
DM-K cube		<a href="#">LDMK</a>	\$350

DA/FI/TR/Cy5-4X-B-LDMK-X32 (set mounted in cube) \$3,117 Contact Us

Filter Role	Filter Size	Part Number	Price <sup>1</sup>
DM-K cube		<a href="#">LDMK</a>	\$350

**Leica DMI8 (P-Cube) for microscopes: DMI8**

DA/FI/TR/Cy5-4X-B-LDMP (set mounted in cube) \$2,480 In Stock

Filter Role	Filter Size	Part Number	Price <sup>1</sup>
Single Band Exciter	25 mm x 5.0 mm	<a href="#">FF01-387/11-25</a>	\$305
Single Band Exciter	25 mm x 5.0 mm	<a href="#">FF02-485/20-25</a>	\$305
Single Band Exciter	25 mm x 5.0 mm	<a href="#">FF01-560/25-25</a>	\$355
Single Band Exciter	25 mm x 5.0 mm	<a href="#">FF01-650/13-25</a>	\$305
Quad Band Emitter	25 mm x 3.5 mm	<a href="#">FF01-440/521/607/700-25</a>	\$495
Quad Band Dichroic	25.2 mm x 35.6 mm x 1.1 mm	<a href="#">FF410/504/582/669-Di01-25x36</a>	\$515
DMI8 (P-Cube) cube		<a href="#">LDMP</a>	\$435

## Optical Specifications

Specification	Value
Blocking	BrightLine filters have blocking far exceeding OD 6 as needed to ensure a black background, even when using modern low-noise CCD cameras. The blocking is optimized for microscopy applications using our exclusive SpecMaker™ fluorescence filter design.

## General Filter Specifications

Specification	Value
Microscope Compatibility	BrightLine filters are available to fit Leica, Nikon, Olympus, Zeiss, and Aperio microscopes.
Optical Damage Rating	Testing has proven to show no signs of degradation when exposed to at least 6.0 W of power from an unfiltered xenon arc lamp over a 25 mm diameter (corresponding to 1.2 W/cm <sup>2</sup> ) for over 500 hours.

## Physical Filter Specifications

Specification	Value
Scratch-Dig	60-40
Exciter/Emitter Orientation	Arrow on ring indicates preferred direction of propagation of light.
Dichroic Orientation	"Reflective coating side" should face toward light source and sample.

## Fluorophore Compatibility

★★★★ indicates this filter set was specifically optimized for this fluorophore.

★★★ indicates an excellent spectral match between fluorophore and filter set that should result in nearly ideal performance in most situations.

★★ indicates a good match between fluorophore and filter set, with actual performance dependent on other experimental conditions.

Blue	
Fluorophore	Compatibility
1,8-ANS	★★
4-methylumbelliferone	★★
7-hydroxy-4-methylcoumarin	★★
Alexa Fluor® 405	★★
<b>AMCA (Aminomethylcoumarin)</b>	★★★★
BD Horizon V450	★★★
<b>BFP (EBFP)</b>	★★★★
Calcofluor White	★★
Cascade Blue™	★★
CellTrace calcein violet	★★★
<b>DAPI</b>	★★★★
DiFMU-pH 9.0	★★
DyLight 405	★★★
HiLyte Fluor™ 405	★★
LIVE-DEAD Fixable Violet Dead Cell Stain	★★★
LysoSensor Blue	★★★
LysoTracker Blue	★★
Marina Blue	★★
Pacific Blue™	★★★
sgBFP™	★★★
Sirius	★★
SpectrumBlue	★★
TagBFP	★★
Vybrant DyeCycle Violet	★★

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Green	
Fluorophore	Compatibility
5-carboxy-2,7-dichlorofluorescein	★★

5-FAM (5-carboxyfluorescein)	☆☆☆
Acridine Orange (+DNA)	☆☆
<b>Alexa Fluor® 488</b>	☆☆☆☆☆
Alexa Fluor® 500	☆☆
AmCyan1	☆☆
ATTO 488	☆☆☆
ATTO 495	☆☆☆
BCECF (pH 5.5)	☆☆☆
BCECF (pH 9.0)	☆☆☆
BODIPY FL	☆☆
BODIPY FL-MeOH	☆☆
Calcein	☆☆☆
Calcium Green-1	☆☆
CFP2	☆☆☆
Cy2™	☆☆
CyQUANT GR-DNA	☆☆
DAF-FM-NO	☆☆☆
Dendra2 (Green)	☆☆☆
DiO	☆☆☆
Dronpa	☆☆
DY-505-Phalloidin	☆☆
ecliptic pHluorin pH5.5	☆☆☆
Emerald	☆☆☆
<b>FITC (Fluorescein)</b>	☆☆☆☆☆
FIAsh-CCPFCC	☆☆
Fluo-3	☆☆
Fluo-4	☆☆☆
Fluorescein dextran	☆☆☆
Fluorescein-pH 8.0	☆☆☆
Fluoro-Emerald	☆☆☆
FluoSpheres Yellow-Green fluorescent microspheres	☆☆
<b>GFP (EGFP)</b>	☆☆☆☆☆
Green 496	☆☆☆
Green 500	☆☆☆
HCS LipidTOX Green neutral lipid stain	☆☆☆
HCS LipidTOX Green phospholipidosis	☆☆
HiLyte Fluor™ 488	☆☆☆
LIVE-DEAD Fixable Green Dead Cell Stain	☆☆☆
LysoSensor Green	☆☆
LysoTracker Green	☆☆☆
LysoTracker Yellow HCK-123	☆☆
Magnesium Green	☆☆
mHoneyDew	☆☆
MitoTracker™ Green	☆☆☆
mWasabi	☆☆☆
NBD-X (MeOH)	☆☆
NeuroTrace 500/525 Green Fluorescent Nissl Stain	☆☆☆
Oregon Green™ 488	☆☆☆
Oregon Green™ 514	☆☆
PicoGreen	☆☆
PKH67	☆☆
Qdot® 525 Nanocrystals	☆☆
ratiometric pHluorin pH5	☆☆☆
Rhodamine 110	☆☆☆
Rhodamine 123	☆☆
Rhodamine Green	☆☆☆
Rhodol Green	☆☆☆
sgGFP™ (super glow GFP)	☆☆☆
Sodium Green	☆☆

Spectrum Green	☆☆☆
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	☆☆
TO-PRO-1	☆☆
TOTO-1	☆☆
TurboGFP	☆☆
Vybrant DyeCycle Green	☆☆
wtGFP (wild type GFP, non-UV excitation)	☆☆☆
YFP (yellow GFP)	☆☆
YO-PRO-1	☆☆☆
YOYO-1	☆☆☆

☆☆☆☆ indicates this filter set was specifically optimized for this fluorophore.

☆☆☆ indicates an excellent spectral match between fluorophore and filter set that should result in nearly ideal performance in most situations.

☆☆ indicates a good match between fluorophore and filter set, with actual performance dependent on other experimental conditions.

## Orange

Fluorophore	Compatibility
2-dodecylresorufin-lipid	☆☆☆
5-ROX (carboxy-X-rhodamine)	☆☆☆
5-TAMRA (5-carboxytetramethylrhodamine, pH 7.0)	☆☆
7-AAD	☆☆
Alexa Fluor® 546	☆☆
Alexa Fluor® 555	☆☆
Alexa Fluor® 568	☆☆☆
Alexa Fluor® 594	☆☆
Amplex UltraRed peroxidation product-pH 7.5	☆☆
AsRed 2	☆☆
ATTO 550	☆☆
ATTO 565	☆☆☆
ATTO 590	☆☆
BOBO™-3	☆☆☆
BODIPY TMR-X	☆☆
BODIPY TR-X (MeOH)	☆☆
BODIPY TR-X phalloidin	☆☆
Calcium Crimson	☆☆
Calcium Orange	☆☆
CellTrace BODIPY TR methyl ester	☆☆
CellTracker Red CMTPX	☆☆
Cy3.5™	☆☆☆
Dendra2 (Red)	☆☆
Dil	☆☆
DsRed	☆☆
DsRed-Express	☆☆☆
dTomato	☆☆
DY-590	☆☆
DyLight 594	☆☆
Ethidium bromide	☆☆
Ethidium homodimer	☆☆
FluoSpheres Red fluorescent microspheres	☆☆☆
HcRed1	☆☆
HCS LipidTOX Red neutral lipid stain	☆☆

HCS LipidTOX Red neutral lipid stain	☆☆
HCS LipidTOX Red phospholipidosis	☆☆
HiLyte Fluor™ 594	☆☆
KFP-Red	☆☆☆
LIVE-DEAD Fixable Red Dead Cell Stain	☆☆
LOLO-1	☆☆
LysoTracker Red	☆☆☆
Magnesium Orange	☆☆
mApple	☆☆☆
mCherry	☆☆
Merocyanine 540	☆☆
MitoTracker™ Orange	☆☆
MitoTracker™ Red	☆☆☆
mKate2	☆☆
mOrange	☆☆
mOrange2	☆☆
mRFP	☆☆
mRFP1	☆☆
mRuby	☆☆☆
mStrawberry	☆☆☆
mTangerine	☆☆☆
Nile red-phospholipid	☆☆
Nile red-triglyceride	☆☆
OFP	☆☆
Orange 552	☆☆
pHrodo™, succinimidyl ester	☆☆☆
Propidium Iodide (PI)	☆☆
Pro-Q Diamond	☆☆
Qdot® 585 Nanocrystals	☆☆☆
Qdot® 605 Nanocrystals	☆☆
Qdot® 625 Nanocrystals	☆☆
ReAsH-CCPGCC	☆☆
Red 580	☆☆
Resorufin	☆☆☆
Rhod-2	☆☆
Rhodamine phalloidin	☆☆
Rhodamine Red-X	☆☆☆
SNARF (carboxy) 514 Excitation pH 9	☆☆
SNARF-1 488nm (ph 6.0)	☆☆☆
SNARF-1 488nm (ph 9.0)	☆☆
SNARF-1 514nm (ph 6.0)	☆☆☆
SNARF-1 514nm (ph 9.0)	☆☆
SpectrumOrange	☆☆☆
Sulforhodamine 101-EtOH	☆☆☆
SYTOX Orange	☆☆
Tetramethylrhodamine dextran	☆☆
Texas Red dextran	☆☆
Texas Red DHPE	☆☆
Texas Red®	☆☆
TRITC (Tetramethylrhodamine)	☆☆
TurboFP635(Katushka)	☆☆
TurboRFP	☆☆
X-Rhod-1 Indicator	☆☆

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☆☆☆ indicates an excellent spectral match between fluorophore and filter set that should result in nearly ideal performance in most situations.

☆☆ indicates a good match between fluorophore and filter set, with actual performance dependent on other experimental conditions.

## Red

Fluorophore

Compatibility

Fluorophore	Compatibility
Alexa Fluor® 647	☆☆
Alexa Fluor® 660	☆☆☆
Alexa Fluor® 680	☆☆
Alexa Fluor® 700	☆☆
ATTO 635	☆☆
ATTO 647	☆☆
ATTO 647N	☆☆
ATTO 655	☆☆☆
ATTO 680	☆☆
ATTO 700	☆☆
BODIPY 650/665-X	☆☆
Cy5.5™	☆☆
Cy5™	☆☆
DiD (DiIc18(5)) - Lipophilic Tracer	☆☆
DY-675	☆☆
DyLight 649	☆☆☆
DyLight 680	☆☆
FluoSpheres Dark Red fluorescent microspheres	☆☆☆
HiLyte Fluor™ 647	☆☆☆
HiLyte Fluor™ 680	☆☆
IRDye 680 NHS Ester	☆☆
IRDye 700Phosphoramidite	☆☆
LIVE-DEAD Fixable Far Red Dead Cell Stain	☆☆
MitoTracker™ Deep Red	☆☆
Nile blue-EtOH	☆☆
Qdot® 705 Nanocrystals	☆☆
Quasa 705	☆☆
Red 650	☆☆
SpectrumFRed (Far Red)	☆☆☆
SYTO 60	☆☆☆
SYTOX Red-DNA	☆☆
TO-PRO-3	☆☆
TOTO-3	☆☆

## Technical Information

Topic	Description
<a href="#">High Performance Microscopy</a>	An overview of high performance microscopy, including solutions from Semrock and additional learning resources.
<a href="#">Spectral Modeling in Fluorescence Microscopy</a>	Discusses various sources of noise in fluorescence microscopy and how to maximize signal-to-noise ratios using software, sample preparation and optical filter selection
<a href="#">New Optical Filters Improve High-Speed Multicolor Fluorescence Imaging</a>	Turan Erdogan, PhD, Semrock Inc., BioPhotonics, March 2006 Compares benefits and drawbacks of full multiband, pinkel and sedat filter sets for high-speed multicolor fluorescence imaging
<a href="#">Multiband Filter Set Terminology</a>	Compares benefits and drawbacks of full multiband, pinkel and sedat filter sets
<a href="#">Orientation of Filters in a Microscope</a>	A guide to properly orienting Semrock filters based on the filter markings.
<a href="#">Introduction to Fluorescence Filters</a>	Shows how optical filters are used in a traditional fluorescence microscope and describes important factors to consider when choosing optical filters.
<a href="#">Filter Reliability</a>	Compares the performance and reliability of hard coated filters to traditional soft-coated filters and provides information about the testing standards for Semrock filters
<a href="#">Cube Assembly Instructions</a>	PDF and video instruction for installing filters into popular filter cubes
<a href="#">Cleaning Optical Filters</a>	Instructions for cleaning hard coated optical filters