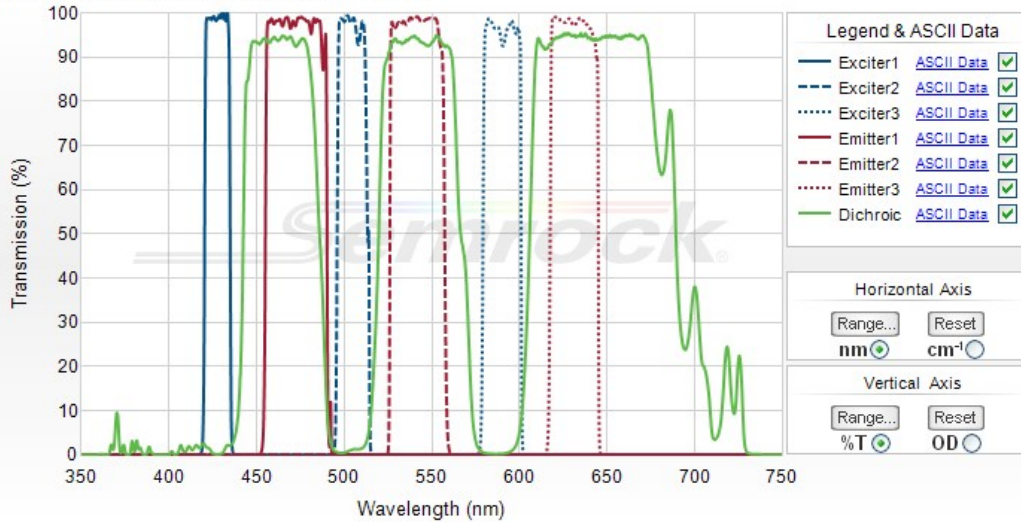


**BrightLine® Sedat filter set, optimized for Cyan & Yellow Fluorescent Proteins & HcRed and other like fluorophores**

Part Number: CFP/YFP/HcRed-3X3M-B-000



**Semrock, Inc**

3625 Buffalo Road, Suite 6  
Rochester, New York 14624

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



**BrightLine® Sedat filter set, optimized for Cyan & Yellow Fluorescent Proteins & HcRed and other like fluorophores**

This 7-filter "Sedat" set is ideal for high-speed sequential imaging CFP, YFP, and HcRed with high brightness, extremely low crosstalk, and superb signal-to-noise ratio. The set is also ideal for samples triple-labeled with CFP, YFP, and an orange or red dye, like Texas Red. It is comprised of three single-band exciters and three single-band emitters, along with a triple-band beamsplitter, and thus works best when used with both exciter and emitter filter wheels.

**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                             |                          |
|---|----------------------------|--|--------------------------|
| CFP/YFP/HcRed-3X3M-B-000 (Standard size set, fits most microscopes)     | \$2,075                    | 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="#">FF01-427/10-25</a>           | \$355                    |
| Single Band Exciter   | 25 mm x 5.0 mm             | <a href="#">FF01-504/12-25</a>           | \$305                    |
| Single Band Exciter   | 25 mm x 5.0 mm             | <a href="#">FF01-589/15-25</a>           | \$355                    |
| Single Band Emitter   | 25 mm x 5.0 mm             | <a href="#">FF02-472/30-25</a>           | \$305                    |
| Single Band Emitter   | 25 mm x 3.5 mm             | <a href="#">FF01-542/27-25</a>           | \$305                    |
| Single Band Emitter   | 25 mm x 5.0 mm             | <a href="#">FF02-632/22-25</a>           | \$305                    |
| Triple Band Dichroic  | 25.2 mm x 35.6 mm x 1.1 mm | <a href="#">FF444/521/608-Di01-25x36</a> | \$435                    |
| CFP/YFP/HcRed-3X3M-B-L01 (Leica 'Large' set)                            | \$2,075                    | 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="#">FF01-427/10-25</a>           | \$355                    |
| Single Band Exciter   | 25 mm x 5.0 mm             | <a href="#">FF01-504/12-25</a>           | \$305                    |
| Single Band Exciter   | 25 mm x 5.0 mm             | <a href="#">FF01-589/15-25</a>           | \$355                    |
| Single Band Emitter   | 25 mm x 5.0 mm             | <a href="#">FF02-472/30-25</a>           | \$305                    |
| Single Band Emitter   | 25 mm x 3.5 mm             | <a href="#">FF01-542/27-25</a>           | \$305                    |
| Single Band Emitter   | 25 mm x 5.0 mm             | <a href="#">FF02-632/22-25</a>           | \$305                    |
| Triple Band Dichroic  | 22.0 mm x 29.0 mm x 1.1 mm | <a href="#">FF444/521/608-Di01-22x29</a> | \$435                    |
| CFP/YFP/HcRed-3X3M-B-L02 (Leica 'Small' set)                            | \$2,329                    | 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="#">FF01-427/10-25</a>           | \$355                    |
| Single Band Exciter   | 25 mm x 5.0 mm             | <a href="#">FF01-504/12-25</a>           | \$305                    |
| Single Band Exciter   | 25 mm x 5.0 mm             | <a href="#">FF01-589/15-25</a>           | \$355                    |
| Single Band Emitter   | 25 mm x 5.0 mm             | <a href="#">FF02-472/30-25</a>           | \$305                    |
| Single Band Emitter   | 25 mm x 3.5 mm             | <a href="#">FF01-542/27-25</a>           | \$305                    |
| Single Band Emitter   | 25 mm x 5.0 mm             | <a href="#">FF02-632/22-25</a>           | \$305                    |
| CFP/YFP/HcRed-3X3M-B-000-X32 (Standard size set, fits most microscopes) | \$2,559                    | Contact Us                               |                          |
| <b>Filter Role</b>  | <b>Filter Size</b>         | <b>Part Number</b>                       | <b>Price<sup>1</sup></b> |

CFP/YFP/HcRed-3X3M-B-L01-X32 (Leica 'Large' set) \$2,559 Contact Us

| Filter Role | Filter Size | Part Number | Price <sup>1</sup> |
|-------------|-------------|-------------|--------------------|
|-------------|-------------|-------------|--------------------|

CFP/YFP/HcRed-3X3M-B-L02-X32 (Leica 'Small' set) \$2,859 Contact Us

| Filter Role | Filter Size | Part Number | Price <sup>1</sup> |
|-------------|-------------|-------------|--------------------|
|-------------|-------------|-------------|--------------------|

\$2,195 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="#">FF01-427/10-25-STR</a>       | \$375              |
| Single Band Exciter  | 25 mm threaded ring for Sutter Lambda filter wheel | <a href="#">FF01-504/12-25-STR</a>       | \$325              |
| Single Band Exciter  | 25 mm threaded ring for Sutter Lambda filter wheel | <a href="#">FF01-589/15-25-STR</a>       | \$375              |
| Single Band Emitter  | 25 mm threaded ring for Sutter Lambda filter wheel | <a href="#">FF02-472/30-25-STR</a>       | \$325              |
| Single Band Emitter  | 25 mm threaded ring for Sutter Lambda filter wheel | <a href="#">FF01-542/27-25-STR</a>       | \$325              |
| Single Band Emitter  | 25 mm threaded ring for Sutter Lambda filter wheel | <a href="#">FF02-632/22-25-STR</a>       | \$325              |
| Triple Band Dichroic | 25.2 mm x 35.6 mm x 1.1 mm                         | <a href="#">FF444/521/608-Di01-25x36</a> | \$435              |

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

CFP/YFP/HcRed-3X3M-B-NQF (set mounted in cube) \$2,470 Contact Us

| Filter Role          | Filter Size                | Part Number                              | Price <sup>1</sup> |
|----------------------|----------------------------|--|--------------------|
| Single Band Exciter  | 25 mm x 5.0 mm             | <a href="#">FF01-427/10-25</a>           | \$355              |
| Single Band Exciter  | 25 mm x 5.0 mm             | <a href="#">FF01-504/12-25</a>           | \$305              |
| Single Band Exciter  | 25 mm x 5.0 mm             | <a href="#">FF01-589/15-25</a>           | \$355              |
| Single Band Emitter  | 25 mm x 5.0 mm             | <a href="#">FF02-472/30-25</a>           | \$305              |
| Single Band Emitter  | 25 mm x 3.5 mm             | <a href="#">FF01-542/27-25</a>           | \$305              |
| Single Band Emitter  | 25 mm x 5.0 mm             | <a href="#">FF02-632/22-25</a>           | \$305              |
| Triple Band Dichroic | 25.2 mm x 35.6 mm x 1.1 mm | <a href="#">FF444/521/608-Di01-25x36</a> | \$435              |
| Quadfluor cube       |                            | <a href="#">NQF</a>                      | \$395              |

CFP/YFP/HcRed-3X3M-B-NQF-X32 (set mounted in cube) \$2,944 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

CFP/YFP/HcRed-3X3M-B-NTE (set mounted in cube) \$2,470 Contact Us

| Filter Role          | Filter Size                | Part Number                              | Price <sup>1</sup> |
|----------------------|----------------------------|--|--------------------|
| Single Band Exciter  | 25 mm x 5.0 mm             | <a href="#">FF01-427/10-25</a>           | \$355              |
| Single Band Exciter  | 25 mm x 5.0 mm             | <a href="#">FF01-504/12-25</a>           | \$305              |
| Single Band Exciter  | 25 mm x 5.0 mm             | <a href="#">FF01-589/15-25</a>           | \$355              |
| Single Band Emitter  | 25 mm x 5.0 mm             | <a href="#">FF02-472/30-25</a>           | \$305              |
| Single Band Emitter  | 25 mm x 3.5 mm             | <a href="#">FF01-542/27-25</a>           | \$305              |
| Single Band Emitter  | 25 mm x 5.0 mm             | <a href="#">FF02-632/22-25</a>           | \$305              |
| Triple Band Dichroic | 25.2 mm x 35.6 mm x 1.1 mm | <a href="#">FF444/521/608-Di01-25x36</a> | \$435              |
| TE 2000 cube         |                            | <a href="#">NTE</a>                      | \$395              |

CFP/YFP/HcRed-3X3M-B-NTE-X32 (set mounted in cube) \$2,944 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

CFP/YFP/HcRed-3X3M-B-OMF (set mounted in cube) \$2,510 Contact Us

| Filter Role         | Filter Size    | Part Number                    | Price <sup>1</sup> |
|---------------------|----------------|--------------------------------|--------------------|
| Single Band Exciter | 25 mm x 5.0 mm | <a href="#">FF01-427/10-25</a> | \$355              |
| Single Band Exciter | 25 mm x 5.0 mm | <a href="#">FF01-504/12-25</a> | \$305              |
| Single Band Exciter | 25 mm x 5.0 mm | <a href="#">FF01-589/15-25</a> | \$355              |
| Single Band Emitter | 25 mm x 5.0 mm | <a href="#">FF02-472/30-25</a> | \$305              |

|                      |                            |  |       |
|----------------------|----------------------------|--|-------|
| Single Band Emitter  | 25 mm x 3.5 mm             | <a href="#">FF01-542/27-25</a>           | \$305 |
| Single Band Emitter  | 25 mm x 5.0 mm             | <a href="#">FF02-632/22-25</a>           | \$305 |
| Triple Band Dichroic | 25.2 mm x 35.6 mm x 1.1 mm | <a href="#">FF444/521/608-Di01-25x36</a> | \$435 |
| U-MF2 cube           |                            | <a href="#">OMF</a>                      | \$435 |

CFP/YFP/HcRed-3X3M-B-OMF-X32 (set mounted in cube) \$2,979 [Contact Us](#)

| Filter Role | Filter Size | Part Number         | Price1 |
|-------------|-------------|---------------------|--------|
| U-MF2 cube  |             | <a href="#">OMF</a> | \$435  |

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

CFP/YFP/HcRed-3X3M-B-OFF (set mounted in cube) \$2,510 [Contact Us](#)

| Filter Role          | Filter Size                | Part Number                              | Price1 |
|----------------------|----------------------------|--|--------|
| Single Band Exciter  | 25 mm x 5.0 mm             | <a href="#">FF01-427/10-25</a>           | \$355  |
| Single Band Exciter  | 25 mm x 5.0 mm             | <a href="#">FF01-504/12-25</a>           | \$305  |
| Single Band Exciter  | 25 mm x 5.0 mm             | <a href="#">FF01-589/15-25</a>           | \$355  |
| Single Band Emitter  | 25 mm x 5.0 mm             | <a href="#">FF02-472/30-25</a>           | \$305  |
| Single Band Emitter  | 25 mm x 3.5 mm             | <a href="#">FF01-542/27-25</a>           | \$305  |
| Single Band Emitter  | 25 mm x 5.0 mm             | <a href="#">FF02-632/22-25</a>           | \$305  |
| Triple Band Dichroic | 25.2 mm x 35.6 mm x 1.1 mm | <a href="#">FF444/521/608-Di01-25x36</a> | \$435  |
| U-FF cube            |                            | <a href="#">OFF</a>                      | \$435  |

CFP/YFP/HcRed-3X3M-B-OFF-X32 (set mounted in cube) \$2,979 [Contact Us](#)

| Filter Role | Filter Size | Part Number         | Price1 |
|-------------|-------------|---------------------|--------|
| 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

CFP/YFP/HcRed-3X3M-B-ZHE (set mounted in cube) \$2,350 [Contact Us](#)

| Filter Role          | Filter Size                | Part Number                              | Price1 |
|----------------------|----------------------------|--|--------|
| Single Band Exciter  | 25 mm x 5.0 mm             | <a href="#">FF01-427/10-25</a>           | \$355  |
| Single Band Exciter  | 25 mm x 5.0 mm             | <a href="#">FF01-504/12-25</a>           | \$305  |
| Single Band Exciter  | 25 mm x 5.0 mm             | <a href="#">FF01-589/15-25</a>           | \$355  |
| Single Band Emitter  | 25 mm x 5.0 mm             | <a href="#">FF02-472/30-25</a>           | \$305  |
| Single Band Emitter  | 25 mm x 3.5 mm             | <a href="#">FF01-542/27-25</a>           | \$305  |
| Single Band Emitter  | 25 mm x 5.0 mm             | <a href="#">FF02-632/22-25</a>           | \$305  |
| Triple Band Dichroic | 25.2 mm x 35.6 mm x 1.1 mm | <a href="#">FF444/521/608-Di01-25x36</a> | \$435  |
| FL Cube EC P+C cube  |                            | <a href="#">ZHE</a>                      | \$275  |

CFP/YFP/HcRed-3X3M-B-ZHE-X32 (set mounted in cube) \$2,884 [Contact Us](#)

| Filter Role         | Filter Size | Part Number         | Price1 |
|---------------------|-------------|---------------------|--------|
| 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

CFP/YFP/HcRed-3X3M-B-LDMK (set mounted in cube) \$2,425 [Contact Us](#)

| Filter Role          | Filter Size                | Part Number                              | Price1 |
|----------------------|----------------------------|--|--------|
| Single Band Exciter  | 25 mm x 5.0 mm             | <a href="#">FF01-427/10-25</a>           | \$355  |
| Single Band Exciter  | 25 mm x 5.0 mm             | <a href="#">FF01-504/12-25</a>           | \$305  |
| Single Band Exciter  | 25 mm x 5.0 mm             | <a href="#">FF01-589/15-25</a>           | \$355  |
| Single Band Emitter  | 25 mm x 5.0 mm             | <a href="#">FF02-472/30-25</a>           | \$305  |
| Single Band Emitter  | 25 mm x 3.5 mm             | <a href="#">FF01-542/27-25</a>           | \$305  |
| Single Band Emitter  | 25 mm x 5.0 mm             | <a href="#">FF02-632/22-25</a>           | \$305  |
| Triple Band Dichroic | 22.0 mm x 29.0 mm x 1.1 mm | <a href="#">FF444/521/608-Di01-22x29</a> | \$435  |
| DM-K cube            |                            | <a href="#">LDMK</a>                     | \$350  |

CFP/YFP/HcRed-3X3M-B-LDMK-X32 (set mounted in cube) \$2,979 [Contact Us](#)

| Filter Role | Filter Size | Part Number          | Price1 |
|-------------|-------------|----------------------|--------|
| DM-K cube   |             | <a href="#">LDMK</a> | \$350  |

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

CFP/YFP/HcRed-3X3M-B-LDMP (set mounted in cube) \$2,510 [Contact Us](#)

| Filter Role         | Filter Size    | Part Number                    | Price1 |
|---------------------|----------------|--------------------------------|--------|
| Single Band Exciter | 25 mm x 5.0 mm | <a href="#">FF01-427/10-25</a> | \$355  |
| Single Band Exciter | 25 mm x 5.0 mm | <a href="#">FF01-504/12-25</a> | \$305  |
| Single Band Exciter | 25 mm x 5.0 mm | <a href="#">FF01-589/15-25</a> | \$355  |
| Single Band Emitter | 25 mm x 5.0 mm | <a href="#">FF02-472/30-25</a> | \$305  |

|                      |                            |  |       |
|----------------------|----------------------------|--|-------|
| Single Band Emitter  | 25 mm x 3.5 mm             | <a href="#">FF01-542/21-25</a>           | \$305 |
| Single Band Emitter  | 25 mm x 5.0 mm             | <a href="#">FF02-632/22-25</a>           | \$305 |
| Triple Band Dichroic | 25.2 mm x 35.6 mm x 1.1 mm | <a href="#">FF444/521/608-Di01-25x36</a> | \$435 |
| DMi8 (P-Cube) cube   |                            | <a href="#">LDMP</a>                     | \$435 |

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

### 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.

| Cyan                                     |               |
|--|---------------|
| Fluorophore                              | Compatibility |
| Aqua 431                                 | ★★★★          |
| ATTO 425                                 | ★★★★          |
| BD Horizon V450                          | ★★            |
| BD Horizon V500                          | ★★            |
| BOBO™.1                                  | ★★★★★         |
| Cerulean                                 | ★★★★          |
| CFP (ECFP)                               | ★★★★★         |
| DEAC                                     | ★★★★          |
| DY-415                                   | ★★★★          |
| ECFP                                     | ★★★★          |
| LIVE-DEAD Fixable Violet Dead Cell Stain | ★★            |
| mBBr+GSH                                 | ★★            |
| mTFP1                                    | ★★            |
| Pacific Blue™                            | ★★            |
| POPO-1                                   | ★★★★          |
| PO-PRO-1                                 | ★★★★          |
| SpectrumAqua                             | ★★★★          |
| SYTO 45                                  | ★★            |
| SYTOX Blue                               | ★★★★★         |
| TagBFP                                   | ★★            |
| TagCFP                                   | ★★            |

★★★★ 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.

| Yellow      |               |
|-------------|---------------|
| Fluorophore | Compatibility |

|   |      |
|---|------|
| 5-carboxy-2,7-dichlorofluorescein                 | ☆☆☆  |
| 5-FAM (5-carboxyfluorescein)                      | ☆☆   |
| 6-carboxyrhodamine 6G                             | ☆☆   |
| 6-JOE   | ☆☆   |
| Acridine Orange (+DNA)                            | ☆☆☆  |
| Alexa Fluor® 488                                  | ☆☆   |
| Alexa Fluor® 500                                  | ☆☆☆  |
| Alexa Fluor® 514                                  | ☆☆   |
| Alexa Fluor® 532                                  | ☆☆   |
| ATTO 488  | ☆☆☆  |
| ATTO 495  | ☆☆☆  |
| ATTO 520  | ☆☆   |
| ATTO 532  | ☆☆   |
| BCECF (pH 5.5)                                    | ☆☆   |
| BCECF (pH 9.0)                                    | ☆☆☆  |
| BODIPY R6G  | ☆☆   |
| Calcein   | ☆☆   |
| <b>Calcium Green-1</b>                            | ☆☆☆☆ |
| CyQUANT GR-DNA                                    | ☆☆☆  |
| DAF-FM-NO   | ☆☆   |
| Dronpa  | ☆☆   |
| DY-505-Phalloidin                                 | ☆☆☆  |
| DyLight 488                                       | ☆☆   |
| Eosin   | ☆☆   |
| FITC (Fluorescein)                                | ☆☆   |
| FIAsH-CCPFCC                                      | ☆☆☆  |
| <b>Fluo-3</b>                                     | ☆☆☆☆ |
| Fluo-4  | ☆☆   |
| Fluorescein dextran                               | ☆☆☆  |
| Fluorescein-pH 8.0                                | ☆☆   |
| Fluoro-Emerald                                    | ☆☆☆  |
| FluoSpheres Yellow-Green fluorescent microspheres | ☆☆   |
| FM 1-43   | ☆☆   |
| Gold 525  | ☆☆   |
| Green 496   | ☆☆   |
| Green 500   | ☆☆☆  |
| HCS LipidTOX Green phospholipidosis               | ☆☆☆  |
| HiLyte Fluor™ 488                                 | ☆☆☆  |
| JO-JO-1, JO-PRO-1                                 | ☆☆   |
| LIVE-DEAD Fixable Green Dead Cell Stain           | ☆☆☆  |
| LysoTracker Yellow HCK-123                        | ☆☆   |
| Magnesium Green                                   | ☆☆☆  |
| mHoneyDew   | ☆☆☆  |
| MitoTracker™ Green                                | ☆☆   |
| mWasabi   | ☆☆   |
| NeuroTrace 500/525 Green Fluorescent Nissl Stain  | ☆☆☆  |
| Oregon Green™ 488                                 | ☆☆☆  |
| Oregon Green™ 514                                 | ☆☆☆  |
| PicoGreen   | ☆☆☆  |
| Qdot® 525 Nanocrystals                            | ☆☆☆  |
| Qdot® 545 Nanocrystals                            | ☆☆   |
| Rhodamine 110                                     | ☆☆   |
| <b>Rhodamine 123</b>                              | ☆☆☆☆ |
| Rhodamine Green                                   | ☆☆☆  |
| Rhodol Green                                      | ☆☆☆  |
| 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 16                                    | ☆☆    |
| SYTO RNASelect geen fluorescent cell stain | ☆☆☆☆  |
| SYTOX Green-DNA                            | ☆☆☆☆  |
| TO-PRO-1                                   | ☆☆☆☆  |
| TOTO-1                                     | ☆☆☆☆  |
| TurboYFP                                   | ☆☆    |
| Venus                                      | ☆☆☆☆  |
| VIC  | ☆☆    |
| Vybrant DyeCycle Green                     | ☆☆☆☆  |
| Vybrant DyeCycle Orange                    | ☆☆    |
| <b>YFP (yellow GFP)</b>                    | ☆☆☆☆☆ |
| YO-PRO-1                                   | ☆☆    |
| YOYO-1                                     | ☆☆    |
| ZsYellow1                                  | ☆☆    |

☆☆☆☆ 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.

## Red

| Fluorophore                                  | Compatibility |
|--|---------------|
| 2-dodecylresorufin-lipid                     | ☆☆            |
| 5-ROX (carboxy-X-rhodamine)                  | ☆☆            |
| 7-AAD  | ☆☆            |
| Alexa Fluor® 568                             | ☆☆            |
| <b>Alexa Fluor® 594</b>                      | ☆☆☆☆☆         |
| ATTO 590                                     | ☆☆☆☆          |
| ATTO 594                                     | ☆☆☆☆          |
| ATTO 610                                     | ☆☆            |
| BOBO™-3                                      | ☆☆            |
| BODIPY 630/650-X                             | ☆☆            |
| BODIPY TR-X phalloidin                       | ☆☆☆☆          |
| Calcium Crimson                              | ☆☆            |
| CellTrace BODIPY TR methyl ester             | ☆☆☆☆          |
| CellTracker Red CMTPX                        | ☆☆            |
| DyLight 594                                  | ☆☆☆☆          |
| FluoSpheres Crimson fluorescent microspheres | ☆☆            |
| FluoSpheres Red fluorescent microspheres     | ☆☆            |
| HcRed1                                       | ☆☆☆☆          |
| HCS CellMask Red cytoplasmic                 | ☆☆            |
| HCS LipidTOX Red neutral lipid stain         | ☆☆☆☆          |
| HCS LipidTOX Red phospholipidosis            | ☆☆            |
| HiLyte Fluor™ 594                            | ☆☆☆☆          |
| Hypericin                                    | ☆☆            |
| KFP-Red                                      | ☆☆            |
| LIVE-DEAD Fixable Red Dead Cell Stain        | ☆☆            |
| mCherry                                      | ☆☆            |
| MitoTracker™ Red                             | ☆☆            |
| mKate2                                       | ☆☆☆☆          |
| mPlum  | ☆☆☆☆          |
| mRFP1  | ☆☆            |
| Nile red-phospholipid                        | ☆☆            |
| Qdot® 625 Nanocrystals                       | ☆☆            |
| ReAsH-CCPGCC                                 | ☆☆            |
| Red 580                                      | ☆☆            |
| SNARF (carboxy) 514 Excitation pH 9          | ☆☆☆☆          |

|                        |     |
|------------------------|-----|
| SNARF-1 488nm (ph 9.0) | ☆☆☆ |
| SNARF-1 514nm (ph 9.0) | ☆☆☆ |
| SpectrumRed            | ☆☆☆ |
| SYTO 17                | ☆☆  |
| SYTO 59                | ☆☆  |
| SYTO 61                | ☆☆  |
| Texas Red dextran      | ☆☆☆ |
| Texas Red DHPE         | ☆☆  |
| Texas Red®             | ☆☆☆ |
| TurboFP635(Katushka)   | ☆☆☆ |
| X-Rhod-1 Indicator     | ☆☆  |
| YO-PRO-3               | ☆☆  |
| YOYO-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<br>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  |