

## Technical Specs Epifluorescence

|                     | Options                 | Britemac              | Macred             | Calvados                 | Granny                |
|---------------------|-------------------------|-----------------------|--------------------|--------------------------|-----------------------|
|                     |                         |                       | <b>Limelight</b>   | <b>Santana</b>           |                       |
| <b>Objectives</b>   | <b>Air</b>              | 2.5, 5, 10, 20        | 2.5, 5, 10, 20     | 2.5, 5, 10, 20           | 10, 20, 32            |
|                     | <b>Oil</b>              | 40, 63, 100           | 40, 63, 100        | 40, 63, 100              | 40, 63, 100           |
| <b>Fluorophores</b> |                         | <b>B, G, R, Y, FR</b> | <b>B, G, R, FR</b> | <b>B, C, G, Y, R, FR</b> | <b>B, G, R, Y, FR</b> |
| <b>Light Source</b> | <b>Transmitted</b>      | White light           | White light        | White LED                |                       |
|                     | <b>Fluorescence</b>     | Exfo                  | ExFo               | LED                      | Lumen Fluo            |
| <b>Camera</b>       |                         | Monochrome            | Monochrome         | Monochrome + colour      | Monochrome            |
|                     |                         |                       |                    |                          |                       |
| <b>Techniques</b>   | <b>Colourimetric</b>    | No                    | Yes (Mac Red only) | No                       | No                    |
|                     | <b>Multiple channel</b> | Yes                   | Yes                | Yes                      | Yes                   |
|                     | <b>Z-Stack</b>          | Yes                   | No                 | Yes                      | Yes                   |
|                     | <b>Tiling</b>           | Yes                   | No                 | Yes                      | No                    |

| Fluorophore    | Excitation   | Emission    | Dye example          |
|----------------|--------------|-------------|----------------------|
| <b>Blue</b>    | 350 - 410nm  | 380 - 440nm | DAPI, Hoechst AF405  |
| <b>Cyan</b>    | 420 - 460    | 480 - 520   | CFP                  |
| <b>Green</b>   | 480 - 505 nm | 510 - 540nm | FITC, AF488, GFP     |
|                |              |             | eYFP, Cy3, TRITC,    |
| <b>Yellow</b>  | 514 - 540nm  | 530 - 550m, | AF555                |
|                |              |             | Texas Red, mCherry,  |
| <b>Red</b>     | 560 - 600nm  | 580 - 620nm | AF568, AF594         |
| <b>Far Red</b> | 630 - 670nm  | 650 - 720nm | Cy5, AF647, Atto 655 |

Other fluorochromes can be used with these filter sets, so long as they fall between the excitation and emission values of the filters. A fuller list can be found in Common Fluorophores section on the website or online, where the fluorophore name can be entered and the excitation/emission spectra can be viewed.

<https://searchlight.semrock.com/>