

Nikon Filter Chart

Name	Excitation	Dichroic	Emission	Comments
Cy5 Faster	640 - 659	673-735	677-712	Individual Excitation LEDs, Single Quad Band Dichroic Filter, Single Quad Band Emission Filter This is the faster method of capture since only the high speed LEDs turn on/off via USB control. However you may experience some bleedthrough* of dyes into other channels. LED on/off time ~1 usec, Dichroic Change time ~1 sec, Emission Change time ~ 100 msec
mCherry Faster	548 - 573	586-628	590-624	
GFP Faster	473 - 497	506-531	510-531	
DAPI Faster	381 - 394	412-462	420-460	
DIC Faster	Halogen	Quad Band	Polariser	
Cy5 Fast	640 - 659	673-735	672-712	Individual Excitation LEDs, Single Quad Band Dichroic Filter, Individual Emission Filters. This is the slower method of capture, since Bandpass Emission Filters move. The Benefit is that you are less likely to experience bleedthrough*.
mCherry Fast	548 - 573	586-628	590-625	
GFP Fast	473 - 497	506-531	510-540	
DAPI Fast	381 - 394	412-462	420-460	
DIC Fast	Halogen	Quad Band	Polariser	
RFP Triple	570-599	614-642	613-649	Individual Excitation LEDs, Single Quad Band Dichroic Filter, Individual Emission Filters. This is the slower method of capture, since Bandpass Emission Filters move. The Benefit is that you are less likely to experience bleedthrough*.
GFP Triple	473 - 497	520-540	520-540	
DAPI Triple	381 - 394	446-468	446-468	
DIC Triple	Halogen	Triple Band	Polariser	
RFP Dual	570-599	610-660	613-649	Individual Excitation LEDs, Single Quad Band Dichroic Filter, Individual Emission Filters. This is the slower method of capture, since Bandpass Emission Filters move. The Benefit is that you are less likely to experience bleedthrough*.
GFP Dual	473 - 497	510-560	510-538	
DIC Dual	Halogen	Dual Band	Polariser	
YFP	497-512	520-595	529-555	Individual Excitation LEDs, Single Quad Band Dichroic Filter, Individual Emission Filters. This is the slower method of capture, since Bandpass Emission Filters move. The Benefit is that you are less likely to experience bleedthrough*.
CFP	421-434	440-485	459-499	
DIC Dual	Halogen	Dual Band	Polariser	
GFP LP	473-497	488 LP	505-950	Individual Excitation LEDs, Single Quad Band Dichroic Filter, Individual Emission Filters. This is the slower method of capture, since Bandpass Emission Filters move. The Benefit is that you are less likely to experience bleedthrough*.
DIC	Halogen	Polariser	Empty	
Cy5 Fastest	640 - 659	673-735	677-712	Individual Excitation LEDs, Single Quad Band Dichroic Filter, Single Quad Band Emission Filter This is the fastest method of capture since only the high speed LEDs turn on/off via TTL pulses However you may experience some bleedthrough* of dyes into other channels. Multiple Fastest captures at the highest speed possible, with the same camera exposure time
mCherry Fastest	548 - 573	586-628	590-624	
GFP Fastest	473 - 497	506-531	510-531	
DAPI Fastest	381 - 394	412-462	420-460	
Multi Fastest				

*Bleedthrough - This occurs when two dyes are excited by the one excitation filter and then emit at different wavelengths.
If the emission filter transmits both wavelengths, then the monochrome camera is unable to distinguish them.