

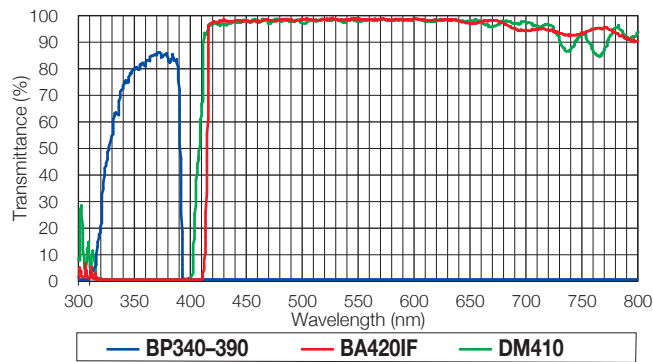
Technical Specifications



■ Ultraviolet excitation

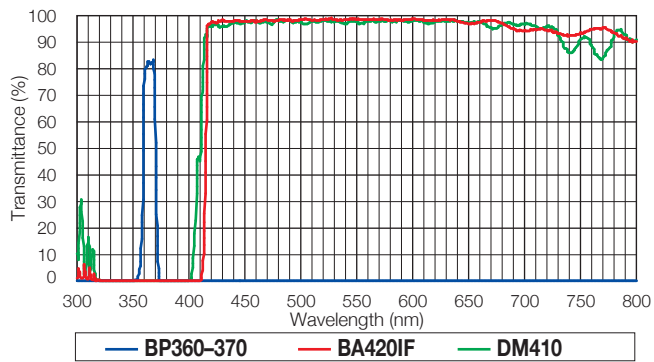
Wideband

U-FUW



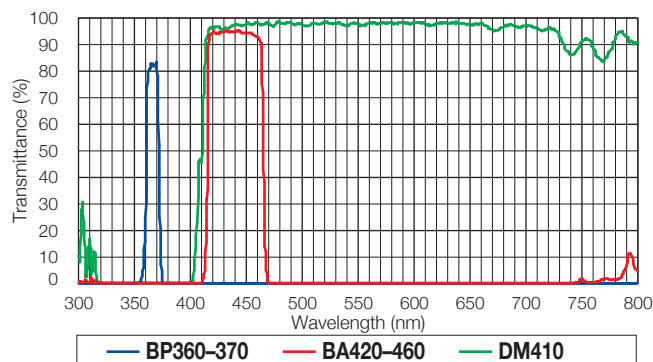
Narrow band

U-FUN



Narrow band (Bandpass filter)

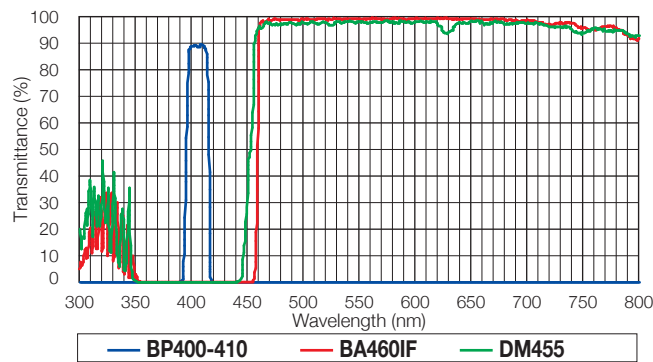
U-FUNA



■ Violet excitation

Narrow band

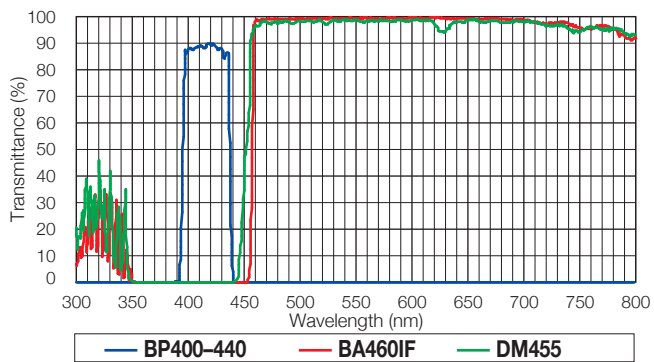
U-FVN



■ Blue excitation

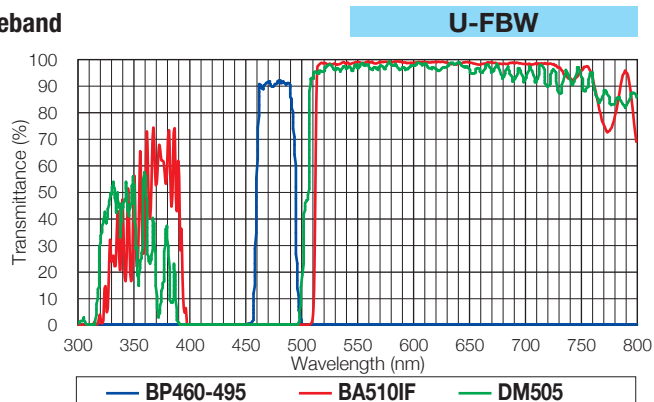
Wideband

U-FBVW

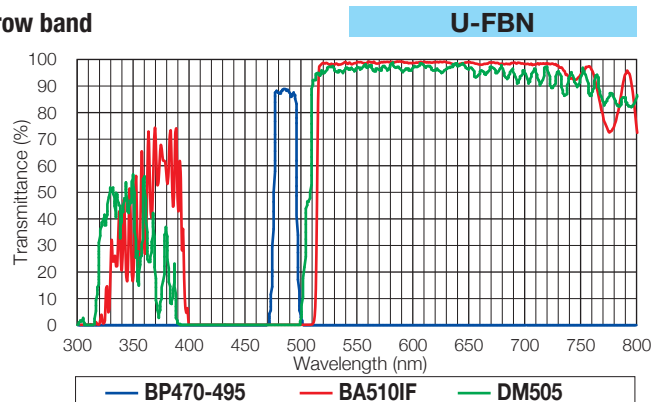


Blue excitation

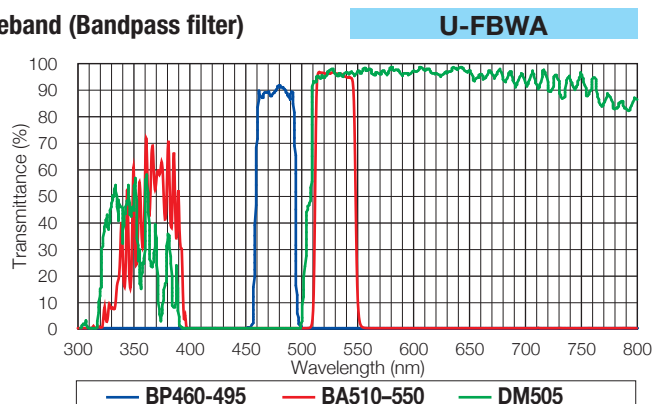
Wideband



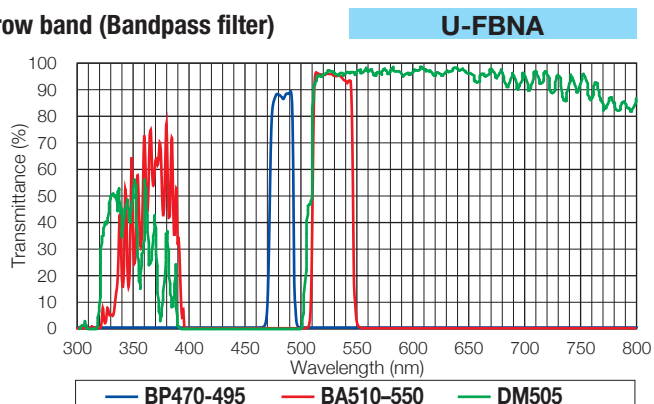
Narrow band



Wideband (Bandpass filter)

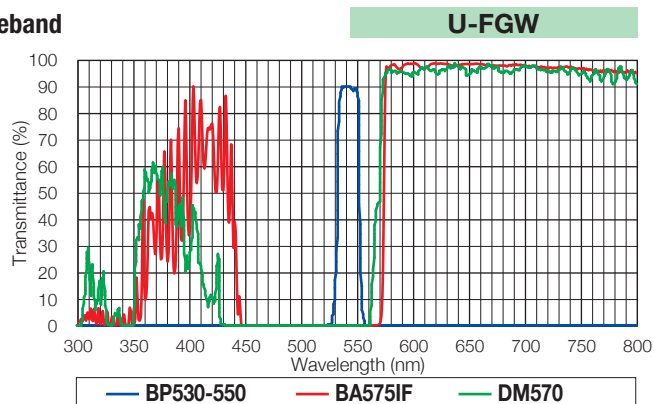


Narrow band (Bandpass filter)

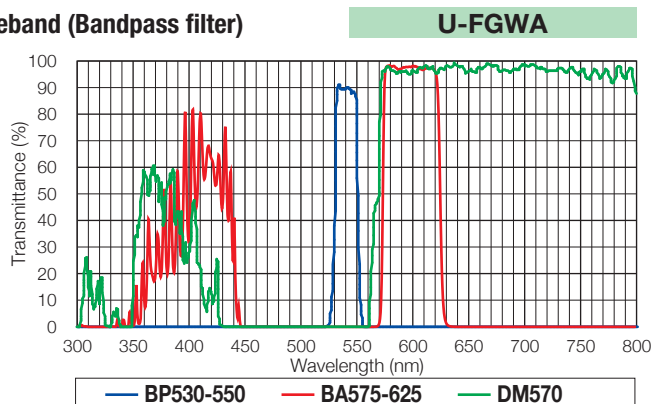


Green excitation

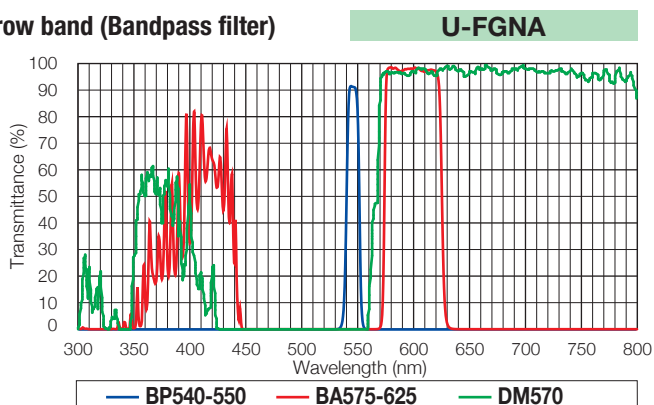
Wideband



Wideband (Bandpass filter)

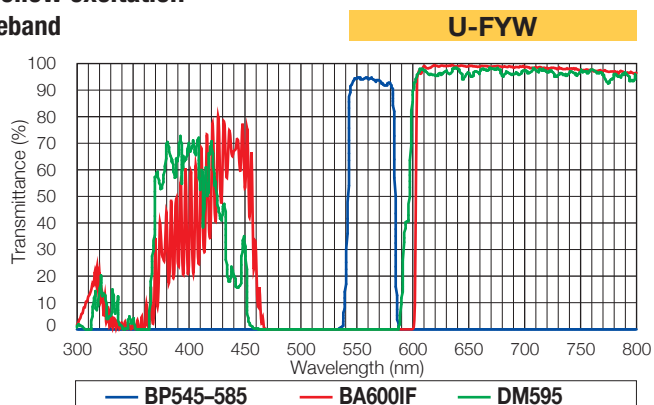


Narrow band (Bandpass filter)



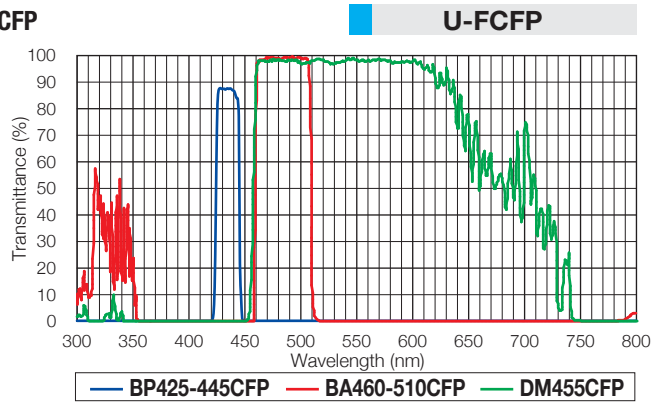
Yellow excitation

Wideband

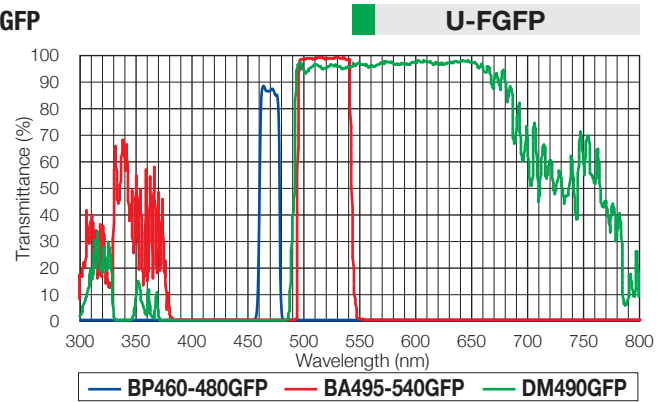


— BP: Excitation filter — BA: Barrier filter — DM: Dichromatic mirror

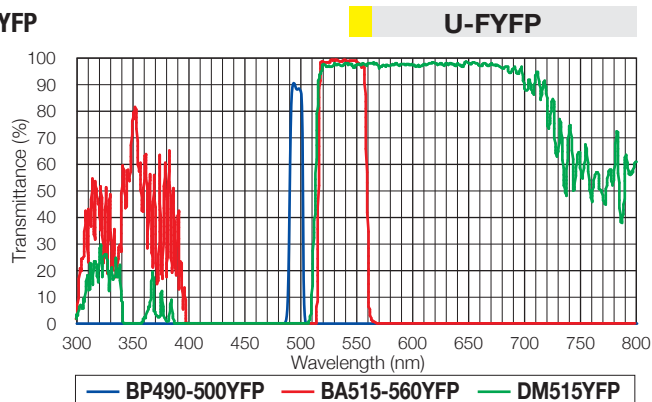
For CFP



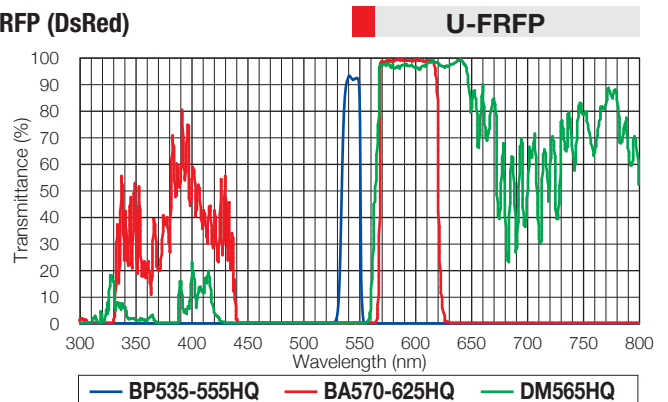
For GFP



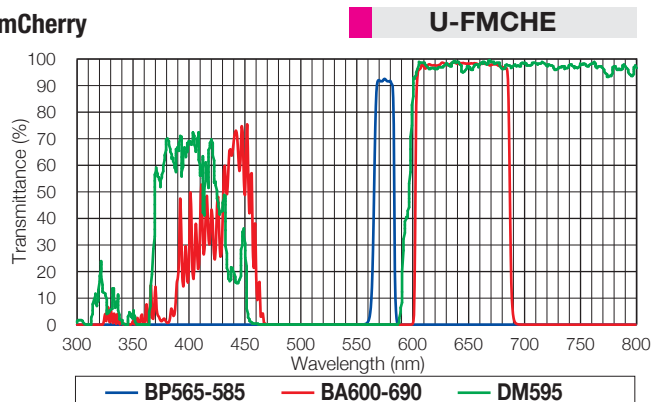
For YFP



For RFP (DsRed)



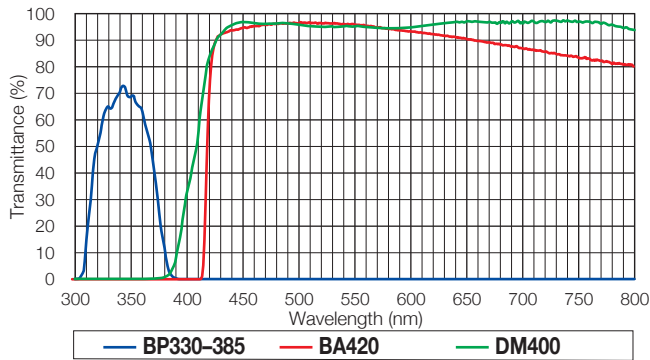
For mCherry



Ultraviolet excitation

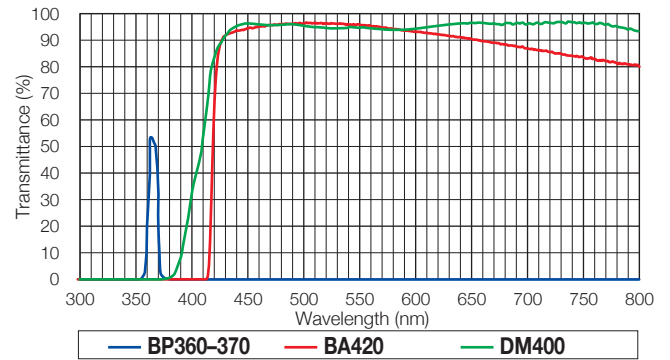
Wideband

U-MWU2



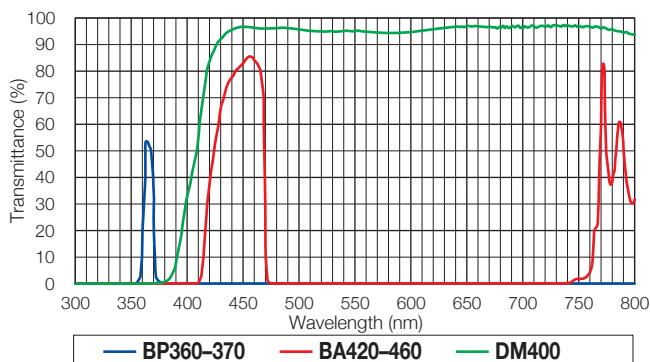
Narrow band

U-MNU2



Narrow band (Bandpass filter)

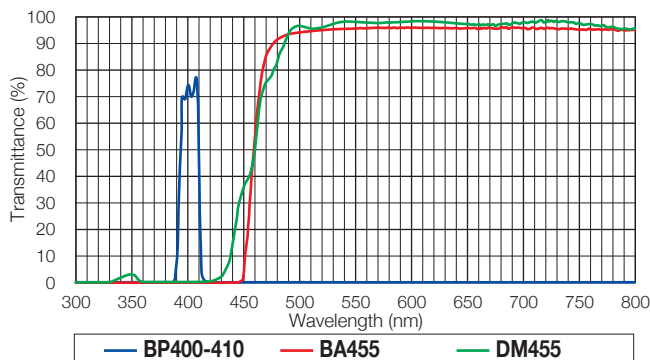
U-MNUA2



Violet excitation

Narrow band

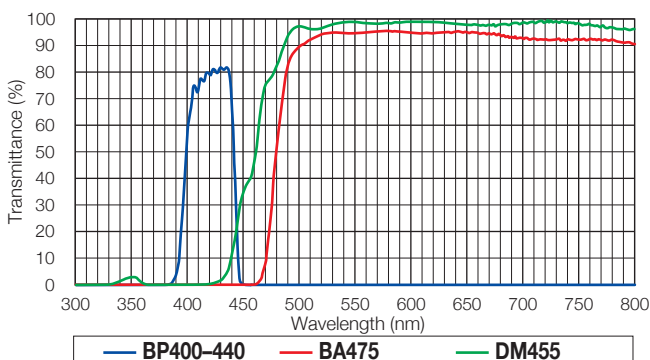
U-MNV2



Blue excitation

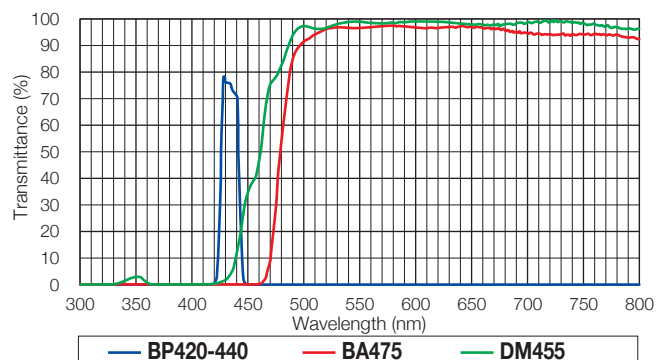
Wideband

U-MWBV2



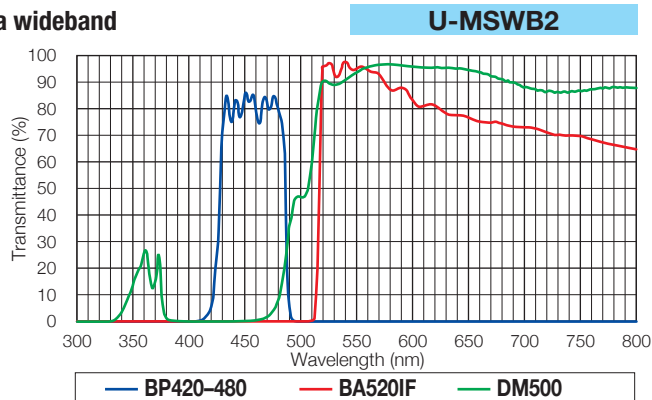
Narrow band

U-MNBV2

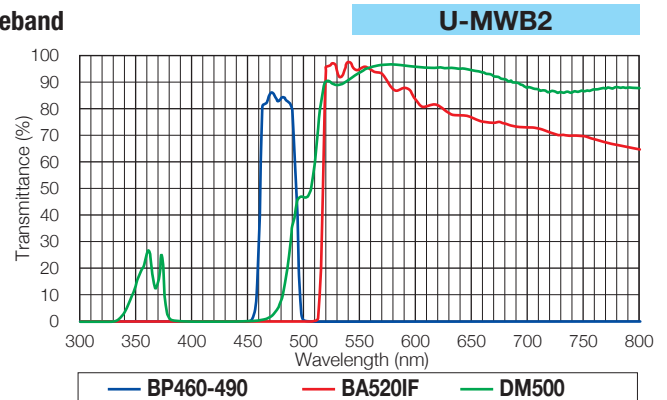


Blue excitation

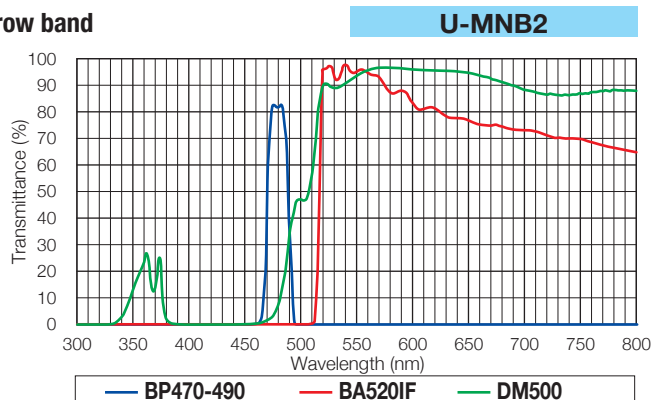
Ultra wideband



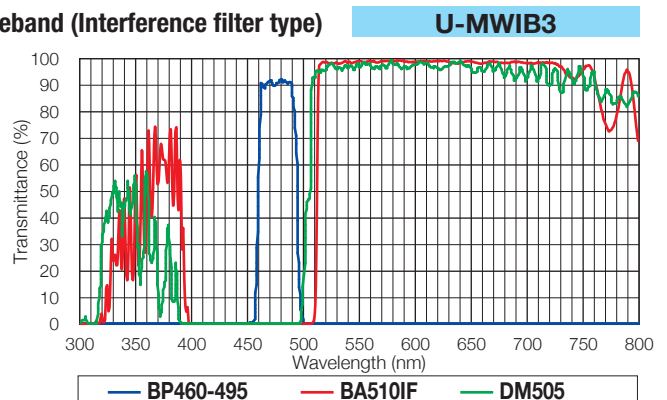
Wideband



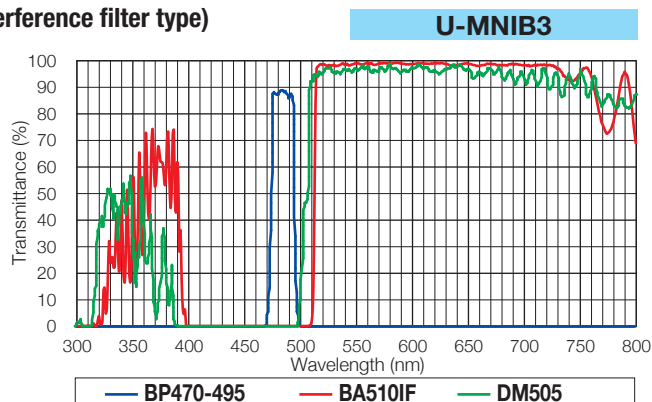
Narrow band



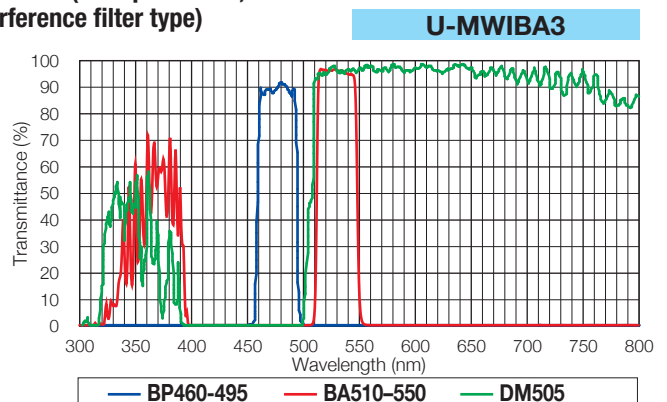
Wideband (Interference filter type)



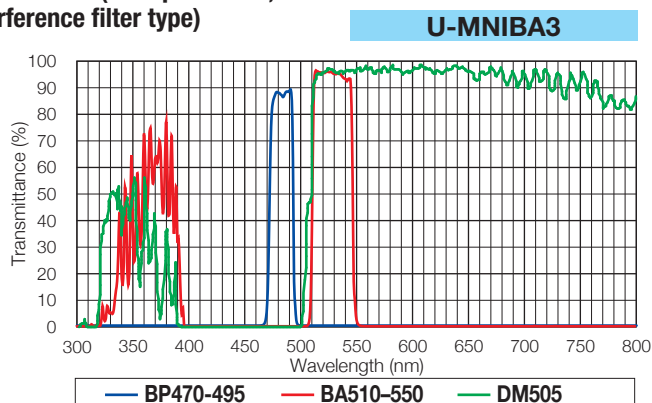
Narrow band (Interference filter type)



Wideband (Bandpass filter, interference filter type)



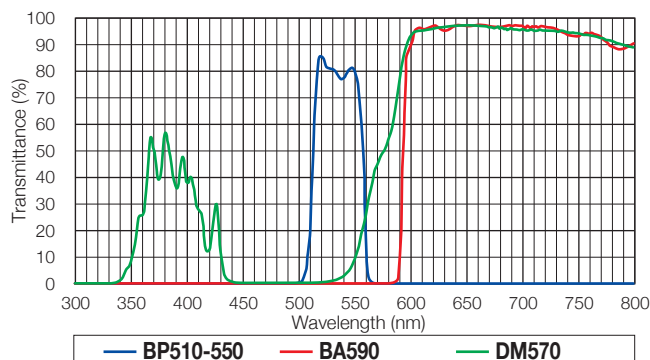
Narrow band (Bandpass filter, interference filter type)



Green excitation

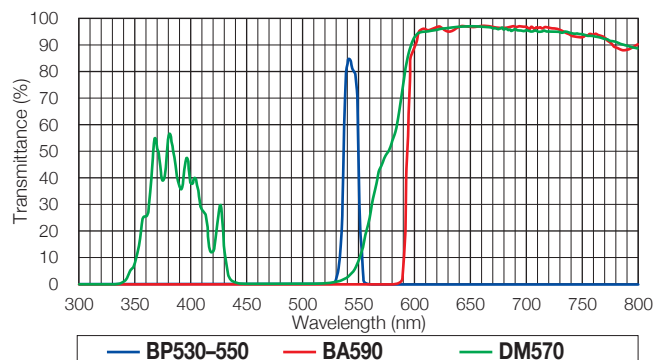
Wideband

U-MWG2



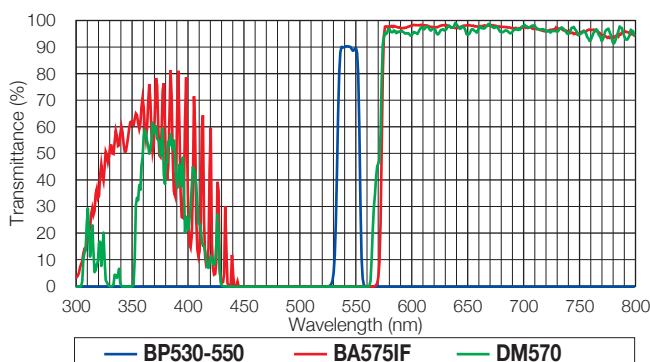
Narrow band

U-MNG2



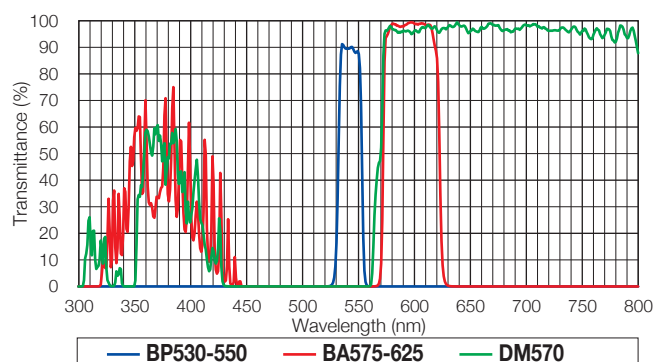
Wideband

U-MWIG3



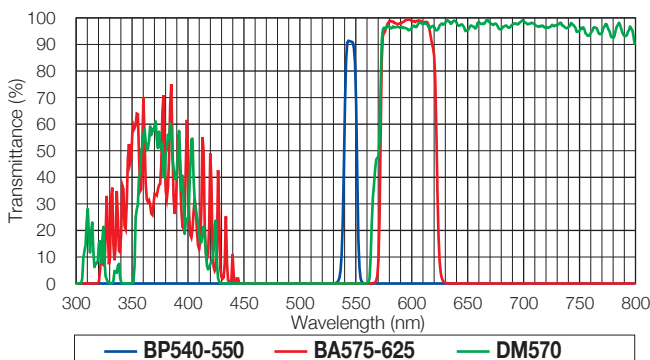
Wideband (Bandpass filter, interference filter type)

U-MWIGA3



Narrow band (Bandpass filter, interference filter type)

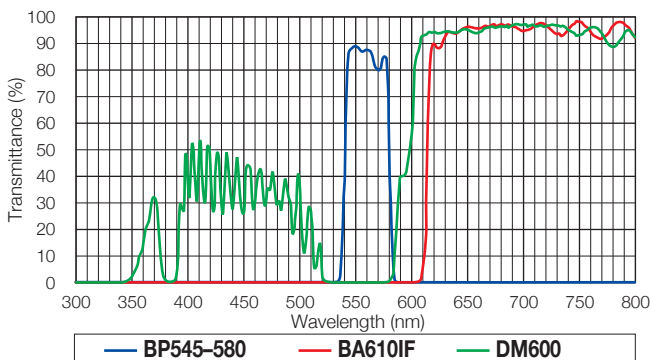
U-MNIGA3



Yellow excitation

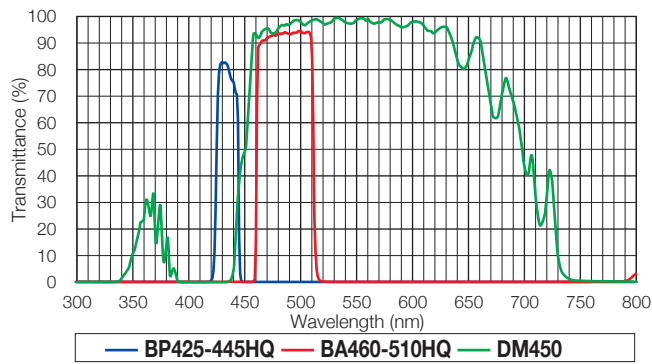
Wideband (Interference filter type)

U-MWIY2



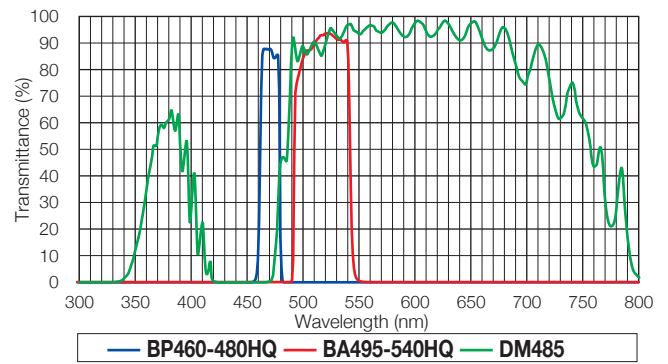
For CFP

U-MCFPHQ



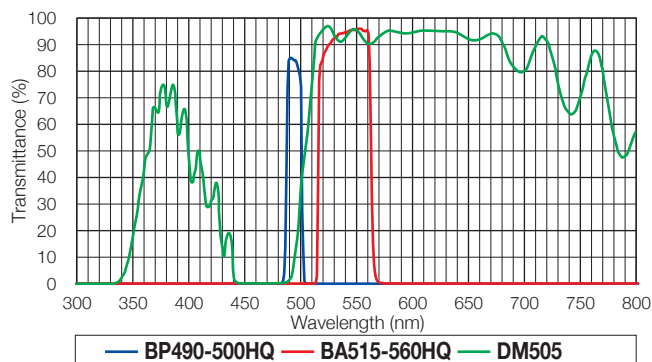
For GFP

U-MGFPHQ



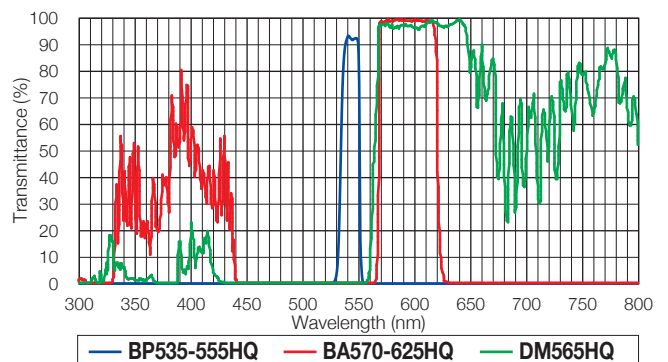
For YFP

U-MYFPHQ



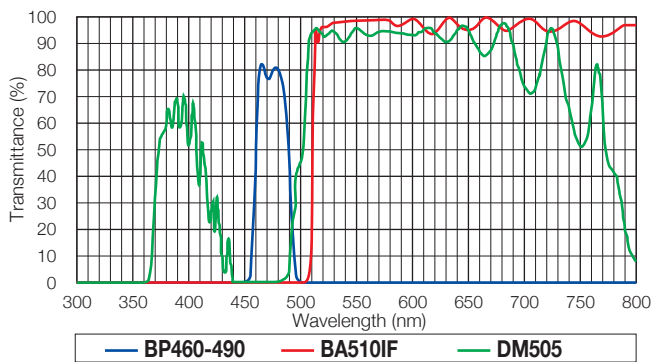
For RFP (DsRed)

U-MRFPHQ



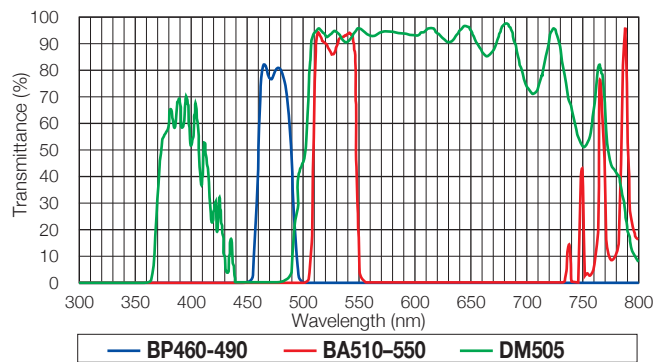
For GFP (long path filter)

U-MGFP/XL



For GFP

U-MGFPA/XL



U-MGFP/XL and U-MGFPA/XL are required to optimize illumination when using the XLFLUOR4x or XLFLUOR2x and MVX objectives.

Making an Optional Fluorescence Mirror Unit (Excitation filter/Barrier filter/Dichromatic mirror)

Empty mirror unit

Custom fluorescence mirror units can be assembled by fitting a commercially available excitation filter, barrier filter and dichromatic mirror in the empty mirror unit frame.

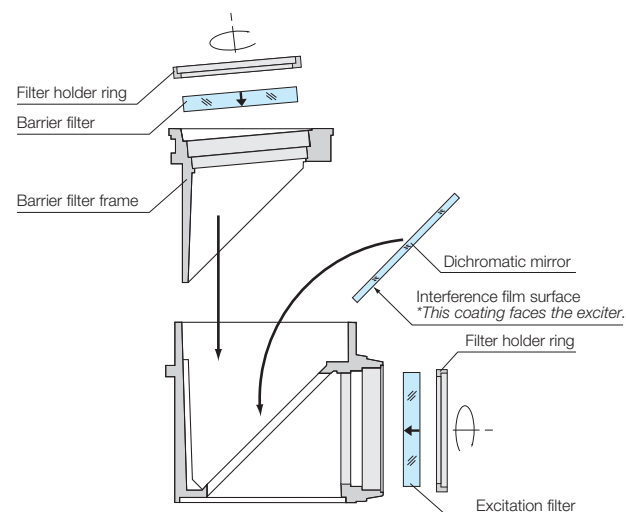


U-FF (for BX3 and IX3)



U-MF2 (for BX51WI/BX61WI)

Assembling excitation filter, barrier filter and dichromatic mirror



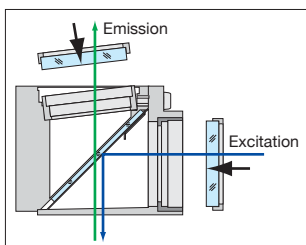
(Example: U-FF)

Notes)

- Be sure to mount the interference film surface faces the exciter.
- Take care to avoid soiling the surface with fingerprints, etc.

Olympus filter set

- Be sure to mount the filter in the direction shown by the arrow.



Size requirement for optical parts: U-FF

- Excitation filter } $\phi 25 \begin{smallmatrix} 0 \\ -0.2 \end{smallmatrix} \text{ mm}$
• Barrier filter } thickness 2.5–6 mm
- Dichromatic mirror $26 \begin{smallmatrix} 0 \\ -0.8 \end{smallmatrix} \text{ mm} \times 38 \begin{smallmatrix} 0 \\ -0.4 \end{smallmatrix} \text{ mm}$
thickness $1 \begin{smallmatrix} 0.4 \\ -0.1 \end{smallmatrix} \text{ mm}$

Size requirement for optical parts: IX3-FFXL

- Excitation filter $\phi 32 \begin{smallmatrix} -0.1 \\ -0.2 \end{smallmatrix} \text{ mm}$
thickness 5.2–5.8 mm
- Barrier filter $\phi 32 \begin{smallmatrix} -0.1 \\ -0.2 \end{smallmatrix} \text{ mm}$
thickness 3.1 mm
- Dichromatic mirror $32 \begin{smallmatrix} -0.1 \\ -0.3 \end{smallmatrix} \text{ mm} \times 44 \begin{smallmatrix} -0.1 \\ -0.3 \end{smallmatrix} \text{ mm}$
thickness $1.5 \pm 0.05 \text{ mm}$

Size requirement for optical parts: U-MF2

- Excitation filter } $\phi 25 \begin{smallmatrix} -0.1 \\ -0.2 \end{smallmatrix} \text{ mm}$
• Barrier filter } maximum thickness 6 mm
- Dichromatic mirror $26 \begin{smallmatrix} -0.1 \\ -0.3 \end{smallmatrix} \text{ mm} \times 38 \begin{smallmatrix} -0.1 \\ -0.3 \end{smallmatrix} \text{ mm}$
thickness $1 \pm 0.05 \text{ mm}$

Size requirement for optical parts: U-MF/XL

- Excitation filter $\phi 25 \begin{smallmatrix} -0.1 \\ -0.2 \end{smallmatrix} \text{ mm}$
maximum thickness 6 mm
- Barrier filter $\phi 32 \begin{smallmatrix} -0.1 \\ 0.2 \end{smallmatrix} \text{ mm}$
maximum thickness 4 mm
- Dichromatic mirror $32 \begin{smallmatrix} -0.1 \\ -0.3 \end{smallmatrix} \text{ mm} \times 44 \begin{smallmatrix} -0.1 \\ -0.3 \end{smallmatrix} \text{ mm}$
thickness $1.5 \pm 0.05 \text{ mm}$

Mirror Unit Selection Chart According to Fluorochrome Characteristics

Fluorochrome	Excitation maximum (nm)	Emission maximum (nm)	Applicable BX3/IX3 mirror unit	Applicable BX51WI/BX61WI mirror unit
Fluorescent protein variants				
AmCyan	458	489	U-FCFP, U-FBVW	U-MWBV2, U-MNBV2, U-MCFPHQ
Azami-Green	492	505	U-FBWA, U-FBNA, U-FGFP, U-FBW, U-FBN	U-MWIB3, U-MWIBA3, U-MNIB3, U-MNIBA3, U-MGFPHQ
DsRed2	563	582	U-FGW, U-FGWA, U-FGNA, U-FRFP	U-MWIG3, U-MWIGA3, U-MNIGA3, U-MRFPHQ
EBFP	380	440	U-FUNA, U-FUW, U-FUN, U-FVN	U-MWU2, U-MNU2, U-MNUA2, U-MNV2
ECFP	433	475	U-FCFP, U-FBVW, U-FVN	U-MCFPHQ, U-MWBV2, U-MNBV2, U-MNV2
EGFP	488	507	U-FBWA, U-FBNA, U-FGFP, U-FBW, U-FBN	U-MGFPHQ, U-MNIB3, U-MWIBA3, U-MWIB3, U-MNIBA3
EYFP	513	527	U-FBWA, U-FBNA, U-FYFP, U-FBW, U-FBN	U-MYFPHQ, U-MWIBA3, U-MNIBA3, U-MWIBA3, U-MNIBA3, U-MNIB3, U-MNB2, U-MWB2, U-MWIB3
Fucci (mAG1)	492/551	505/565	U-FBNA, U-FGFP, U-FBWA, U-FBW, U-FBN	U-MNIBA3, U-MGFPHQ, U-MNIB3, U-MWIBA3, U-MWIB3
GFP (S65T)	488	510	U-FBWA, U-FBNA, U-FGFP, U-FBW, U-FBN	U-MGFPHQ, U-MWIBA3, U-MNIBA3, U-MWIB3, U-MNIB3
GFP (WT)	395, 475	510	U-FBWA, U-FBNA, U-FGFP, U-FBW, U-FBN	U-MWIBA3, U-MNIBA3, U-MGFPHQ, U-MWIB3, U-MNIB
HcRed	588	618	U-FYW	U-MWIY2
Midoriishi-Cyan	472	495	U-FBWA, U-FBW, U-FBNA, U-FBN, U-FCFP, U-FGFP	U-MWIBA3, U-MWIB3, U-MNIBA3, U-MNIB3, U-MCFPHQ, U-MGFPHQ
mCherry	580	610	U-FMCHE, U-FYW	U-MWIY2
mRFP	584	607	U-FMCHE, U-FYW	U-MWIY2
mStrawberry	574	596	U-FMCHE, U-FYW	U-MWIY2
RFP (DsRed)	558	583	U-FRFP, U-FGW, U-FGWA, U-FGNA	U-MRFPHQ, U-MWIG3, U-MWIGA3, U-MNIGA3
Venus	515	528	U-FYFP	U-MYFPHQ, U-MNB2, U-MNIB3, U-MNIBA3, U-MSWB2, U-MWB2, U-MWIB3, U-MWIBA3
Photoactivation				
Dronpa-Green	503	518	U-FBN, U-FBNA, U-FBW, U-FBWA, U-FYFP	U-MGFPHQ, U-MNB2, U-MNIB3, U-MNIBA3, U-MWB2, U-MWIB3, U-MWIBA3, U-MYFPHQ
PA-GFP	504	517	U-FGFP, U-FBWA, U-FBNA, U-FBW, U-FBN	U-MGFPHQ, U-MNIB3, U-MWIBA3, U-MWIB3, U-MNIBA3
Photoconversion				
Kaede (Green/Red)	509/573	518/582	U-FBN, U-FBNA, U-FBW, U-FBWA, U-FGFP, U-FYFP, U-FGW, U-FGWA, U-FGNA, U-FRFP	U-MWIB3, U-MWIBA3, U-MGFPHQ, U-MYFPHQ, U-MNB2, U-MNIB3, U-MNIBA3, U-MWB2, U-MNIGA3, U-MRFPHQ, U-MWIG3, U-MWIGA3

Fluorochrome	Excitation maximum (nm)	Emission maximum (nm)	Applicable BX3/IX3 mirror unit	Applicable BX51WI/BX61WI mirror unit
Carbohydrate modification, protein modification (labeling)				
<i>Protein modification</i>				
Alexa Fluor 350	346	442	U-FUNA, U-FUW, U-FUN	U-MNUA2, U-MWU2, U-MNU2
Alexa Fluor 405	402	421	U-FUNA, U-FUW, U-FUN	U-MNUA2, U-MWU2, U-MNU2
Alexa Fluor 430	434	539	U-FBWW, U-FVN	U-MWBV2, U-MNBV2, U-MNV2
Alexa Fluor 488	495	519	U-FBWA, U-FBNA, U-FBW, U-FBN	U-MWIBA3, U-MNIBA3, U-MWIB3, U-MNIB3, U-MNB2, U-MWB2
Alexa Fluor 532	531	554	U-FGW, U-FGWA, U-FGNA, U-FRFP	U-MWIG3, U-MWIGA3, U-MNIGA3, U-MRFPHQ
Alexa Fluor 546	556	573	U-FGW, U-FGWA, U-FGNA, U-FRFP	U-MWIG3, U-MWIGA3, U-MNIGA3, U-MRFPHQ
Alexa Fluor 555	555	567	U-FGW, U-FGWA, U-FGNA, U-FRFP	U-MWIG3, U-MWIGA3, U-MNIGA3, U-MRFPHQ
Alexa Fluor 568	578	603	U-FGW, U-FGWA, U-FGNA, U-FRFP, U-FYW, U-MCHE	U-MWIG3, U-MWIGA3, U-MNIGA3, U-MRFPHQ, U-MWIY2
Alexa Fluor 594	590	617	U-FYW, U-FMCHE	U-MWIY2
Allophycocyanin (APC)	650	660	U-FYW	U-MWIY2
7-amino-4-methylcoumarin-3-acetic acid (AMCA)	349	448	U-FUNA, U-FUW, U-FUN	U-MNUA2, U-MWU2, U-MNU2
BODIPY FL	505	513	U-FBWA, U-FBW, U-FBNA, U-FBN, U-FGFP	U-MWIBA3, U-MWIB3, U-MNIBA3, U-MNIB3
Cascade Blue	376	425	U-FUNA, U-FUW, U-FUN	U-MNUA2, U-MWU2, U-MNU2
Fluorescein-isothiocyanate (FITC)	494	518	U-FBWA, U-FBW, U-FBNA, U-FBN, U-FGFP, U-FYFP	U-MWIBA3, U-MNIBA3, U-MWB2, U-MNB2, U-MWIB3, U-MNIB3, U-MGFPHQ, U-MYFPHQ
Oregon Green 488	496	524	U-FBWA, U-FBW, U-FBNA, U-FBN, U-FGFP, U-FYFP	U-MWIBA3, U-MNIBA3, U-MWB2, U-MNB2, U-MWIB3, U-MNIB3, U-MGFPHQ, U-MYFPHQ
Phycoerythrin B (PE-B)	545	576	U-FGW, U-FGWA, U-FGNA, U-FRFP	U-MWIG3, U-MWIGA3, U-MNIGA3, U-MRFPHQ
Phycoerythrin R (PE-R)	490, 565	578	U-FGNA, U-FGW, U-FGWA, U-FRFP	U-MNIGA3, U-MWIG3, U-MWIGA3, U-MRFPHQ
Rhodamine B-isothiocyanate (RITC)	543	580	U-FGW, U-FGWA, U-FGNA, U-FRFP	U-MWIG3, U-MWIGA3, U-MNIGA3, U-MRFPHQ
Texas Red	595	615	U-FYW, U-MCHE	U-MWIY2
Tetramethylrhodamine-isothiocyanate (TRITC)	541	572	U-FGW, U-FGWA, U-FGNA, U-FRFP	U-MWIG3, U-MWIGA3, U-MNIGA3, U-MRFPHQ

Fluorochrome	Excitation maximum (nm)	Emission maximum (nm)	Applicable BX3/IX3 mirror unit	Applicable BX51WI/BX61WI mirror unit
Carbohydrate modification, protein modification (labeling)				
<i>Protein modification</i>				
1-Anilinoanthracene-8-sulfonic acid (ANS)	365	460	U-FUW, U-FUN	U-MWU2, U-MNU2
CPM (7-Diethylamino-3-(4'-Maleimidylphenyl)-4-Methylcoumarin)	~384	470	U-FUW, U-FUN	U-MWU2, U-MNU2
Cy2	489	506	U-FBWA, U-FBNA, U-FBW, U-FBN	U-MWIBA3, U-MNIBA3, U-MWIB3, U-MNIB3
Cy3	(512); 550	570; (615)	U-FGW, U-FGWA, U-FGNA	U-MWIG3, U-MWIGA3, U-MNIGA3
Cy3.5	581	594; (640)	U-FYW, U-FMCHE	U-MWIY2
Dans (1-Dimethyl Amino Naphthalene 5 Sulphonic Acid)	340	525	U-FUW, U-FUN	U-MWU2, U-MNU2
Dansyl chloralide	360	520	U-FUW, U-FUN	U-MWU2, U-MNU2
Dansyl hydrazine	340	525	U-FUW, U-FUN	U-MWU2, U-MNU2
Eosin	525	545	U-FBWA, U-FBNA, U-FBW, U-FBN	U-MWIBA3, U-MNIBA3, U-MWIB3, U-MNIB3
Fluorescamine	390	465/475	U-FUW, U-FUN, U-FNUA, U-FVN	U-MWU2, U-MNU2, U-MNUA2, U-MNV2
FluorX	494	520	U-FBWA, U-FBNA, U-FBW, U-FBN	U-MWIB3, U-MNIB3, U-MWIBA3, U-MNIBA3, U-MSWB2, U-MWB2, U-MNB2
Lucifer Yellow CH	425	528	U-FBVW, U-FBW, U-FBW, U-FBWA	U-MWVB2, U-MNBV2, U-MWIB3, U-MNIB3, U-MWIBA3, U-MNIBA3, U-MWB2, U-MNIB2, U-MSWB2
Monochlorobimane (mBCl)	394	490	U-FUW, U-FUN, U-FUNA, U-FVN	U-MNUA2, U-MWU2, U-MNU2, U-MNV2
o-phthalaldehyde (OPT)	340	455	U-FUNA, U-FUW, U-FUN	U-MNUA2, U-MWU2, U-MNU2
Resorufin	572	583	U-FGW, U-FGWA, U-FGNA	U-MWIG3, U-MWIGA3, U-MNIGA3, U-MWG2, U-MNG2
SITS (Primuline)	395-425	450	U-FUW, U-FUN, U-FUNA, U-FVN	U-MNUA2, U-MWU2, U-MNU2, U-MNV2
SITS (Stilbene Isothiosulphonic acid)	365	460	U-FUW, U-FUN, U-FUNA	U-MNUA2, U-MWU2, U-MNU2
<i>Carbohydrate modification</i>				
Acridavine	436	520	U-FBVW, U-FBW	U-MWVB2, U-MNBV2, U-MWB2, U-MSWB2

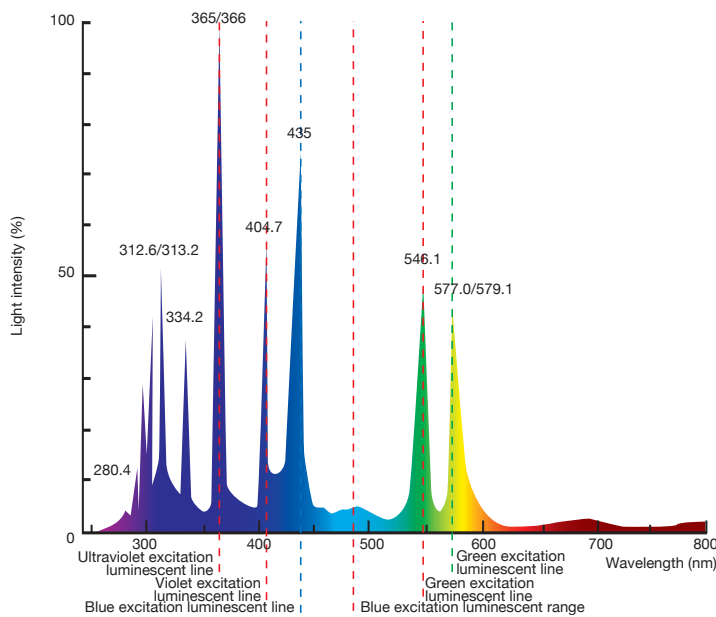
Fluorochrome	Excitation maximum (nm)	Emission maximum (nm)	Applicable BX3/IX3 mirror unit	Applicable BX51WI/BX61WI mirror unit
Nuclei, nucleic acid staining				
<i>Nuclei, nucleic acid</i>				
Acridine Orange	500	530/630-650	U-FBW, U-FBN, U-FBWA, U-FBNA, U-FYFP	U-MWIB3, U-MNIB3, U-MWIBA3, U-MNIBA3
Acridine Yellow	470	550	U-FBW, U-FBN, U-FBWA, U-FBNA	U-MWIB3, U-MNIB3, U-MWIBA3, U-MNIBA3, U-MWB2, U-MNIB2, U-MSWB2
Acriflavine-Feulgen	455	515	U-FBVW, U-FBW, U-FBWA	U-MWBV2, U-MNBV2, U-MWIB3, U-MWIBA3, U-MWB2, U-MSWB2
Auramine O-Feulgen	460	550	U-FBW, U-FBWA, U-FBNA	U-MWIB3, U-MNIB3, U-MWIBA3, U-MNIBA3, U-MWB2, U-MNIB2, U-MSWB2
7-Amino Actinomycin D	546	647	U-FYW, U-FGW, U-FMCHE	U-MWIG3, U-MWG2, U-MNG2, U-MWIY2
bis-Aminophenyl-oxadizole (BAO) -Feulgen	380	470	U-FUW, U-FUN, U-FUNA	U-MWU2, U-MNU2, U-MNUA2
BOBO 1	462	481	U-FBVW	U-MWBV2, U-MNBV2, U-MCFPHQ
BO PRO 1	462	481	U-FBVW	U-MWBV2, U-MNBV2
Chromomycin A3	445	575	U-FBVW	U-MWBV2, U-MNBV2, U-MSWB2
4, 6-diamidino-2-phenyl-indole HCl (DAPI)	345	455	U-FUW, U-FUN, U-FUNA	U-MWU2, U-MNU2, U-MNUA2
Ethidium Bromide	493	620	U-FGW, U-FGWA, U-FGNA	U-MWIG3, U-MWIGA3, U-MNIGA3, U-MWG2, U-MNG2, U-SWG2
Hoechst 33258	345	478	U-FUW, U-FUN, U-FUNA	U-MWU2, U-MNU2, U-MNUA2
Hoechst 33342	343	483	U-FUW, U-FUN, U-FUNA	U-MWU2, U-MNU2, U-MNUA2
Mithramycin	445	575	U-FBVW	U-MWBV2, U-MNBV2, U-MSWB2
Olivomycin	430	545	U-FBVW	U-MWBV2, U-MNBV2
Pararosaniline-Feulgen	570	625	U-FYW, U-FMCHE, U-FGW, U-FGWA, U-FGNA	U-MWIY2, U-MWG2, U-MNG2, U-MWIG3, U-MWIGA3, U-MNIGA3
POPO 1	434	456	U-FVN, U-FBVW, U-FCFP	U-MNV2, U-MWBV2, U-MNBV2, U-MCFPHQ
Propidium Iodide (PI)	536	617	U-FGW, U-FGWA, U-FGNA, U-FYW	U-MWIG3, U-MWIGA3, U-MNIGA3, U-MWIY2
Pyronin Y	540	570	U-FGW, U-FGWA, U-FGNA	U-MWIG3, U-MWIGA3, U-MNIGA3
Quinacrine Mustard	423	503	U-FBVW	U-MWBV2, U-MNBV2
SYTOX Green nucleic acid stain	504	523	U-FBW, U-FBN, U-FBWA, U-FBNA	U-MWIB3, U-MNIB3, U-MWIBA3, U-MNIBA3
Thiazole Orange	510	530	U-FBW, U-FBN, U-FBWA, U-FBNA	U-MWIB3, U-MNIB3, U-MWIBA3, U-MNIBA3
TOTO 1	509	533	U-FBW, U-FBN, U-FBWA, U-FBNA	U-MWIB3, U-MNIB3, U-MWIBA3, U-MNIBA3
TOTO 3	642	661	U-FYW, U-FMCHE	U-MWIY2
TO PRO 3	642	661	U-FYW, U-FMCHE	U-MWIY2
YO PRO 1	491	509	U-FBW, U-FBN, U-FBWA, U-FBNA	U-MWIB3, U-MNIB3, U-MWIBA3, U-MNIBA3
YOYO 1	491	509	U-FBW, U-FBN, U-FBWA, U-FBNA, U-FGFP, U-FYFP	U-MWIB3, U-MNIB3, U-MWIBA3, U-MNIBA3

Fluorochrome	Excitation maximum (nm)	Emission maximum (nm)	Applicable BX3/IX3 mirror unit	Applicable BX51WI/BX61WI mirror unit
Cell viability judgement				
<i>Living cell staining</i>				
Acridine Orange	500	530/630-650	U-FBW, U-FBN, U-FBWA, U-FBNA, U-FYFP	U-MWIB3, U-MNIB3, U-MWIBA3, U-MNIBA3
BCECF indicator	482 (low pH) 503 (high pH)	520 (low pH) 528 (high pH)	U-FBW, U-FBN, U-FBWA, U-FBNA	U-MWIB3, U-MNIB3, U-MWIBA3, U-MNIBA3
Calcein	494	517	U-FBW, U-FBN, U-FBWA, U-FBNA	U-MWIB3, U-MNIB3, U-MWIBA3, U-MNIBA3
Carboxyfluorescein diacetate (CFDA)	496	515	U-FBW, U-FBN, U-FBWA, U-FBNA	U-MWIB3, U-MNIB3, U-MWIBA3, U-MNIBA3
Fluorescein diacetate (FDA)	496	515	U-FBW, U-FBN, U-FBWA, U-FBNA	U-MWIB3, U-MNIB3, U-MWIBA3, U-MNIBA3
<i>Dead cell staining</i>				
Ethidium Bromide	493	620	U-FGW, U-FGWA, U-FGNA	U-MWIG3, U-MWIGA3, U-MNIGA3, U-MWG2, U-MNG2, U-SWG2
Ethidium homodimer-1	528	617	U-FGW, U-FGWA, U-FGNA, U-FYW	U-MWG2, U-MNG2, U-MWIG3, U-MWIGA3, U-MNIGA3
Propidium Iodide (PI)	536	617	U-FGW, U-FGWA, U-FGNA, U-FYW	U-MWIG3, U-MWIGA3, U-MNIGA3, U-MWIY2
Membranes, organelle, membrane potential				
<i>Membranes</i>				
8-Anilino-1-naphthalene sulfonic acid (1,8-ANS)	385	485	U-FUW, U-FUN, U-FUNA	U-MWU2, U-MNU2, U-MNUA2
Dil	550	565	U-FGW, U-FGWA, U-FGNA	U-MWIG3, U-MWIGA3, U-MNIGA3
DiO	484	501	U-FBW, U-FBN, U-FBWA, U-FBNA	U-MWIB3, U-MNIB3, U-MWIBA3, U-MNIBA3, U-MSWB, U-MWB2, U-MNB2
Diphenylhexatriene (DPH)	351	430	U-FUW, U-FUN, U-FUNA	U-MWU2, U-MNU2, U-MNUA2
Filipin	350	480	U-FUW, U-FUN, U-FUNA	U-MWU2, U-MNU2, U-MNUA2
Fluorescamine	390	465	U-FUW, U-FUN, U-FVN	U-MWU2, U-MNU2, U-MNV2
Merocyanine 540	500	580	U-FGW	U-MWG2, U-MNG2, U-MWIG3
<i>Organelle</i>				
Acridine Orange	500	530/630-650	U-FBW, U-FBN, U-FBWA, U-FBNA, U-FYFP	U-MWIB3, U-MNIB3, U-MWIBA3, U-MNIBA3
BODIPY FL Ceramide	503	512	U-FBW, U-FBN, U-FBWA, U-FBNA	U-MWIB3, U-MNIB3, U-MWIBA3, U-MNIBA3
DiO C6(3)	484	500	U-FBW, U-FBN, U-FBWA, U-FBNA	U-MWIB3, U-MNIB3, U-MWIBA3, U-MNIBA3, U-MSWB, U-MWB2, U-MNB2
ERTracker Blue-White DPX	374	575	U-FUW, U-FUN, U-FVN	U-MWU2, U-MNU2, U-MNV2
JC-1	485	530	U-FBW, U-FBN, U-FBWA, U-FBNA	U-MWIB3, U-MNIB3, U-MWIBA3, U-MNIBA3, U-MSWB, U-MWB2, U-MNB2
LysoTracker Red DND-99	577	590	U-FGW, U-FGWA, U-FGNA, U-FYW	U-MWIG3, U-MWIGA3, U-MNIGA3, U-MWIY2
Mito Tracker Green	490	516	U-FBW, U-FBN, U-FBWA, U-FBNA	U-MWIB3, U-MNIB3, U-MWIBA3, U-MNIBA3
MitoTracker Red CMXRos	579	599	U-FGW, U-FGWA, U-FGNA, U-FYW	U-MWIG3, U-MWIGA3, U-MNIGA3, U-MWIY2
Nile Red (phospholipid)	552	636	U-FGW, U-FGWA, U-FGNA, U-FYW	U-MWG2, U-MNG2, U-MWIG3, U-MWIGA3, U-MNIGA3, U-MWIY2
Rhodamine 123	507	530	U-FBW, U-FBN, U-FBWA, U-FBNA	U-MWIB3, U-MNIB3, U-MWIBA3, U-MNIBA3
Pyronin Y	540	570	U-FGW, U-FGWA, U-FGNA	U-MWIG3, U-MWIGA3, U-MNIGA3, U-MWG2, U-MNG2
<i>Membrane potential</i>				
Di-4-ANEPPS	497	710	U-FBW, U-FBN	U-MWIB3, U-MNIB3
Di-8-ANEPPS	465	635	U-FBW, U-FBN	U-MWIB3, U-MNIB3
FM 1-43	473	579	U-FBW, U-FBN	U-MWIB3, U-MNIB3
RH160	577	>610	U-FGW, U-FGWA, U-FGNA, U-FYW	U-MWIG3, U-MWIGA3, U-MNIGA3, U-MWIY2
RH414	490	>662	U-FBW, U-FBN	U-MWIB3, U-MNIB3
RH421	541	>590	U-FGW, U-FGWA, U-FGNA	U-MWIG3, U-MWIGA3, U-MNIGA3
RH423	520-550	>610	U-FGW, U-FGWA, U-FGNA	U-MWIG3, U-MWIGA3, U-MNIGA3
RH795	560	650	U-FGW, U-FYW	U-MWIG3, U-MWIY2

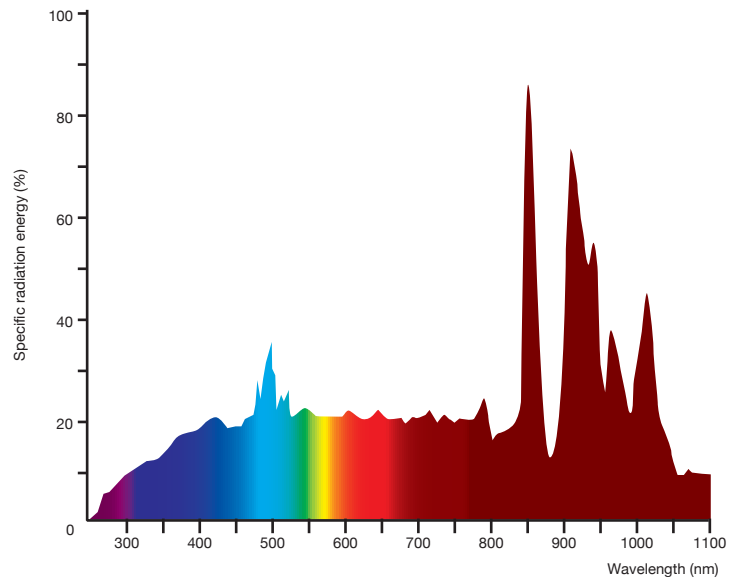
Fluorochrome	Excitation maximum (nm)	Emission maximum (nm)	Applicable BX3/IX3 mirror unit	Applicable BX51WI/BX61WI mirror unit
Bacteria staining, bone staining				
<i>Bacteria</i>				
Acridine Orange	500	530/630-650	U-FBW, U-FBN, U-FBWA, U-FBNA, U-FYFP	U-MWIB3, U-MNIB3, U-MWIBA3, U-MNIBA3
Acridine Yellow	470	550	U-FBW, U-FBN, U-FBWA, U-FBNA	U-MWIB3, U-MNIB3, U-MWIBA3, U-MNIBA3, U-MWB2, U-MNIB2, U-MSWB2
Auramine O	460	550	U-FBVW, U-FBW	U-MWBV2, U-MNBV2, U-MSWB2, U-MWB2, U-MWIB, U-MWIB3
Berberine sulfate	430	550	U-FBVW	U-MWBV2, U-MNBV2
Coriphosphine O	460	575	U-FBW	U-MWB2, U-MWIB3
CTC	430, 480	630	U-FBVW, U-FBW, U-FBN	U-MWBV2, U-MNBV2, U-MWIB3, U-MNIB3
Hoechst 33258	365	465	U-FUW, U-FUN, U-FUNA	U-MWU2, U-MNU2, U-MNUA2
<i>Bone</i>				
Acidic Fuchsin (Pararosaniline)	540	630	U-FGW, U-FGN	U-MWG2, U-MNG2, U-MWIG3
Calcein	495	520	U-FBW, U-FBN, U-FBWA, U-FBNA	U-MWIB3, U-MNIB3, U-MWIBA3, U-MNIBA3
Calcein Blue	375	435	U-FUW, U-FUN, U-FUNA	U-MWU2, U-MNU2, U-MNUA2
Tetracycline	390	560	U-FUW, U-FVN, U-FBVW	U-MWU2, U-MNV2, U-MWBV2, U-MNBV2
Xylenol Orange	440, 570	610	U-FGW, U-FGN	U-MWG2, U-MNG2, U-MWIG3
Ion concentrations				
<i>Calcium</i>				
BTC	400/480	540	U-FVN, U-FBN, U-FBNA, U-FBW, U-FBWA	U-MNV, U-MNIB3, U-MNIBA3, U-MWIB3, U-MWIBA3
Calcium Green	505	532	U-FBN, U-FBNA, U-FBW, U-FBWA	U-MNIB3, U-MNIBA3, U-MWIB3, U-MWIBA3
Fluo 4	495	510	U-FBN, U-FBNA, U-FBW, U-FBWA	U-MNIB3, U-MNIBA3, U-MWIB3, U-MWIBA3
Oregon Green 488 BAPTA-1	494	523	U-FBN, U-FBNA, U-FBW, U-FBWA	U-MNIB3, U-MNIBA3, U-MWIB3, U-MWIBA3
Oregon Green 488 BAPTA-5N	494	521	U-FBN, U-FBNA, U-FBW, U-FBWA	U-MNIB3, U-MNIBA3, U-MWIB3, U-MWIBA3
<i>pH</i>				
BCECF	440/490	530	U-FBVW, U-FBN, U-FBNA, U-FBW, U-FBWA	U-MWBV, U-MNIB3, U-MNIBA3, U-MWIB3, U-MWIBA3
Nerve cell tracer, others				
<i>Nerve cell tracer</i>				
Evans Blue	470-540	680	U-FBW, U-FBN	U-MWIB3, U-MNIB3
Fast Blue	360	410	U-FUW, U-FUN, U-FUNA	U-MWU2, U-MNU2, U-MNUA2
Granular Blue	375	410	U-FUW, U-FUN, U-FUNA	U-MWU2, U-MNU2, U-MNUA2
True Blue	373	404	U-FUW, U-FUN, U-FUNA	U-MWU2, U-MNU2, U-MNUA2
<i>Others</i>				
Aniline blue	370	509	U-FUW, U-FUN	U-MWU2, U-MNU2
Alexa Fluor 488-Phalloidin	495	518	U-FBW, U-FBN, U-FBWA, U-FBNA	U-MWIB3, U-MNIB3, U-MWIBA3, U-MNIBA3
Calcofluor white	440	500-520	U-FUW, U-FUN, U-FVN	U-MWU2, U-MNU2, U-MNV2
Euchrysine (Acridine Orange)	500	530/630-650	U-FBW, U-FBN, U-FBWA, U-FBNA, U-FYFP	U-MWIB3, U-MNIB3, U-MWIBA3, U-MNIBA3
NanoOrange	485	590	U-FBW, U-FBN	U-MWIB3, U-MNIB3
NBD-Phalloidin	465	536	U-FBW, U-FBN, U-FBWA, U-FBNA	U-MWIB3, U-MNIB3, U-MWIBA3, U-MNIBA3
Rhodamine-Phalloidin	540	565	U-FGW, U-FGWA, U-FGNA	U-MWIG3, U-MWIGA3, U-MNIGA3, U-MWG2, U-MNG2
sulforhodamine 101	586	605	U-FYW, U-FMCHE	U-MWIY2
Thioflavin T	430	485	U-FBVW	U-MWBV2, U-MNBV2

Light Source Spectral Characteristics

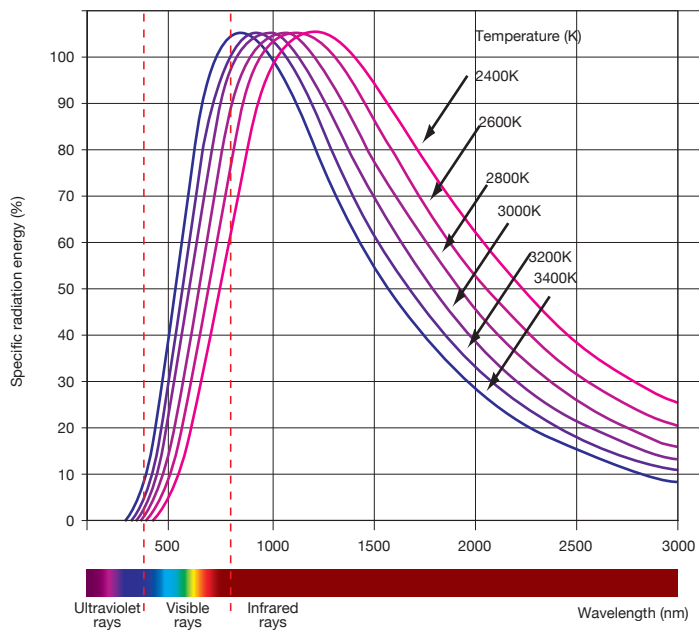
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