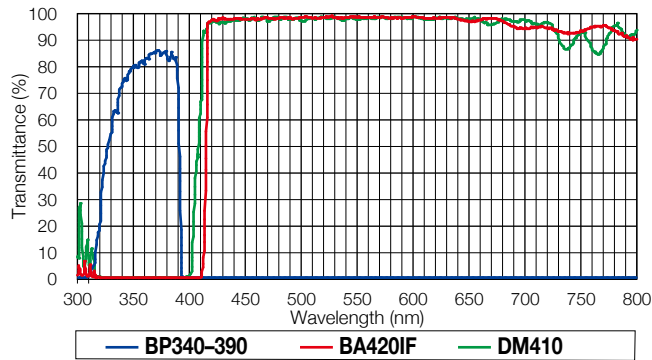
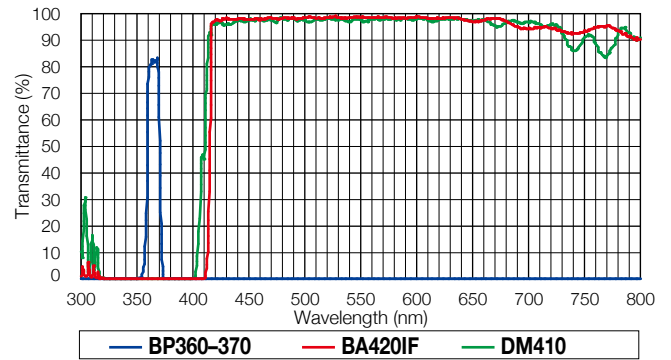
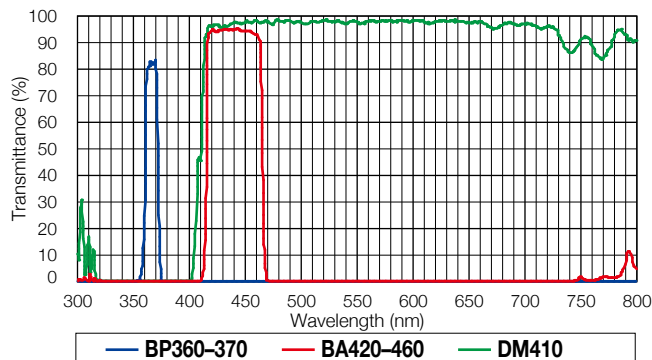
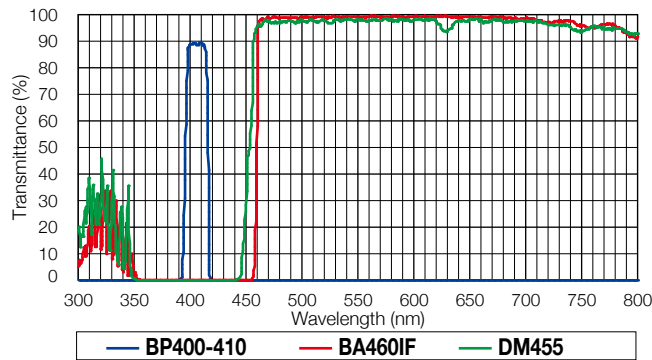
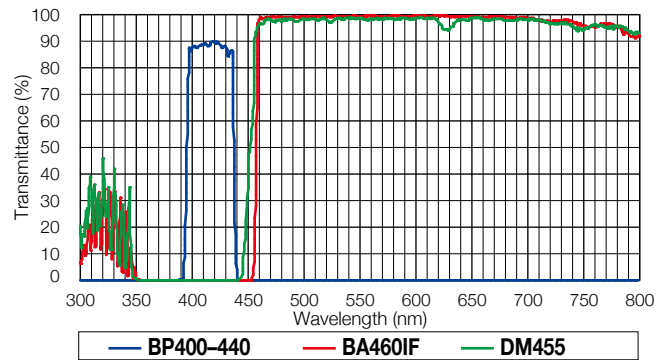
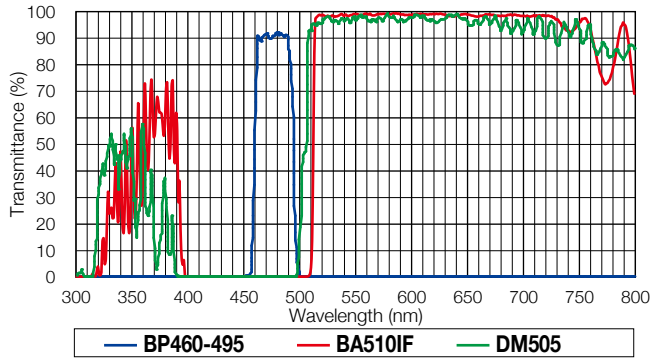
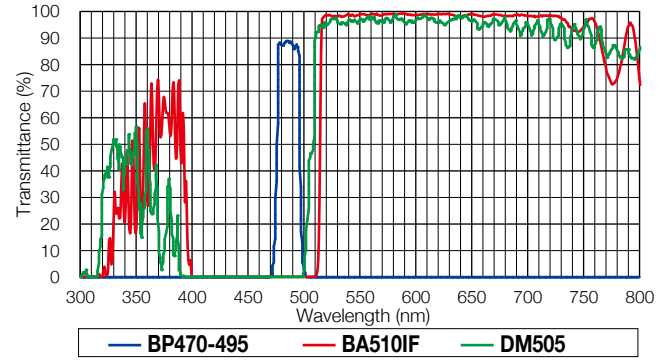
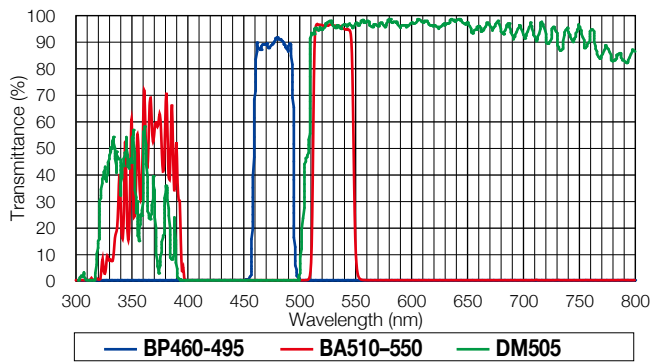
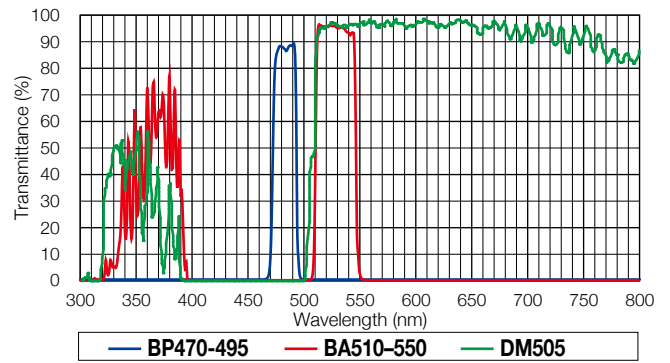
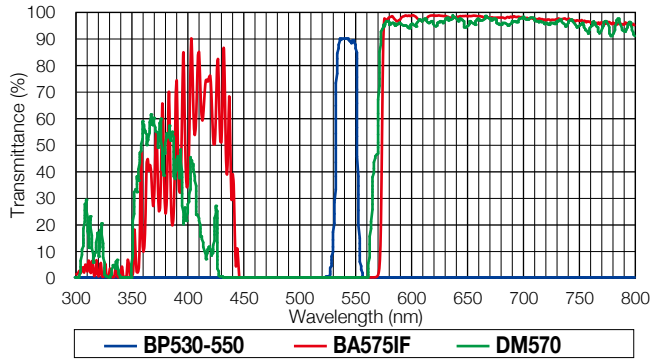
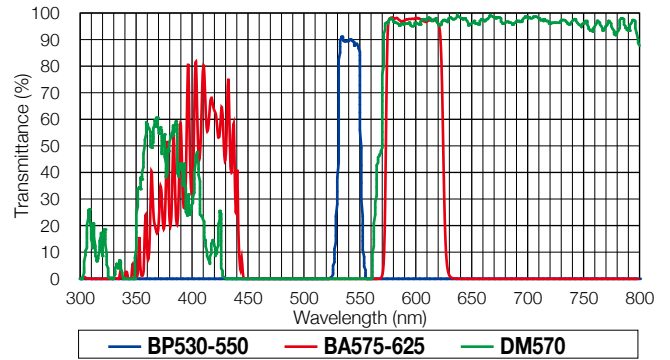
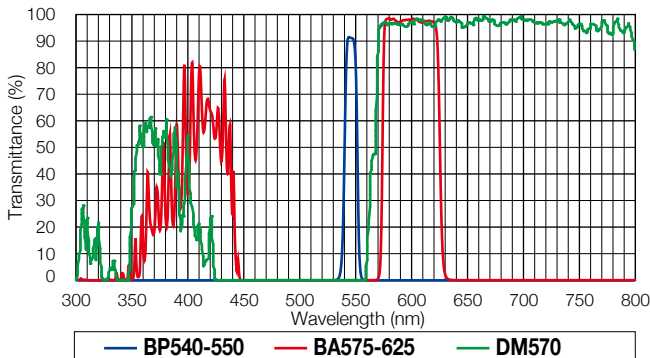
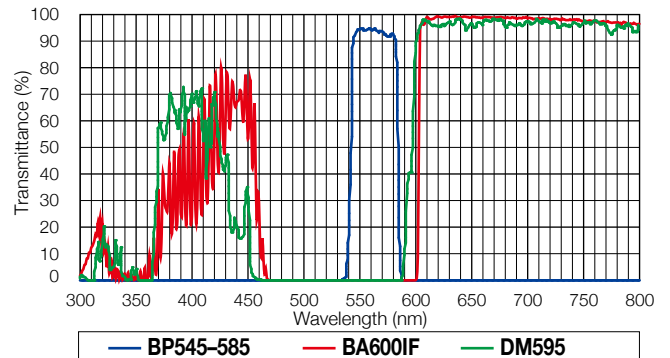


Technical Specifications



For Ultraviolet/Violet/Blue/Green/Yellow Excitations: Mirror Units for BX3 and IX3 Microscopes

Ultraviolet excitation**Wideband****U-FUW****Narrowband****U-FUN****Narrowband (Bandpass filter)****U-FUNA****Violet excitation****Narrowband****U-FVN****Blue excitation****Wideband****U-FBVW**

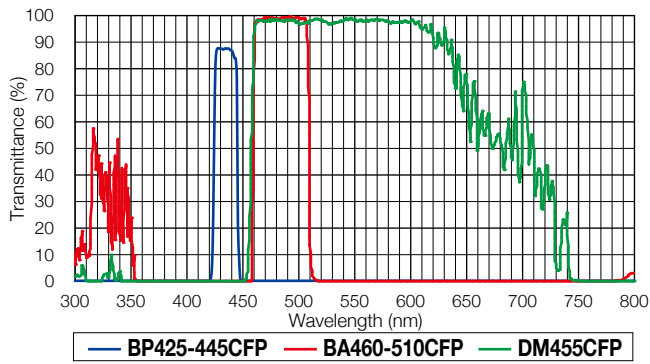
Blue excitation**Wideband****U-FBW****Narrowband****U-FBN****Wideband (Bandpass filter)****U-FBWA****Narrowband (Bandpass filter)****U-FBNA****Green excitation****Wideband****U-FGW****Wideband (Bandpass filter)****U-FGWA****Narrowband (Bandpass filter)****U-FGNA****Yellow excitation****Wideband****U-FYW**

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

Exclusively for Fluorescent Proteins: Mirror Units for BX3 and IX3 Microscopes

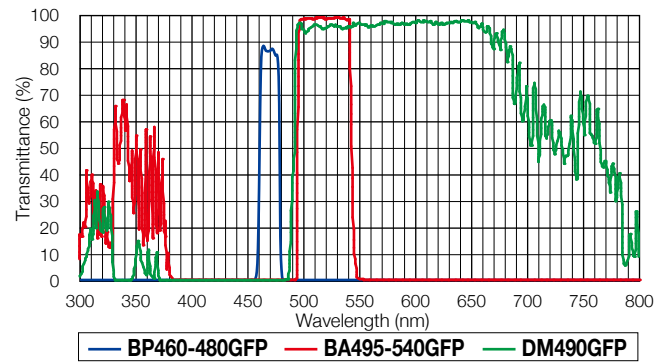
For CFP

U-FCFP



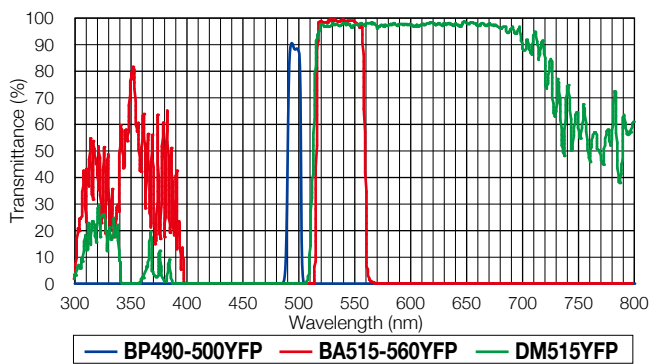
For GFP

U-FGFP



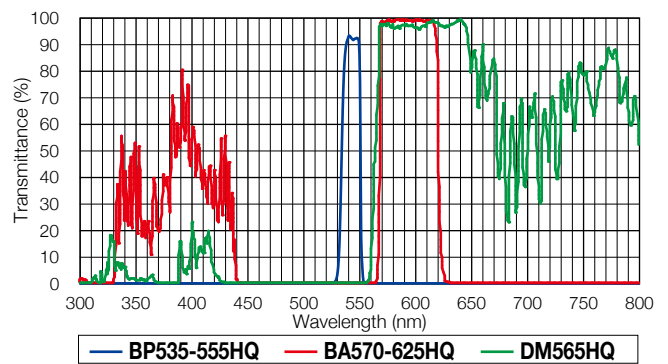
For YFP

U-FYFP



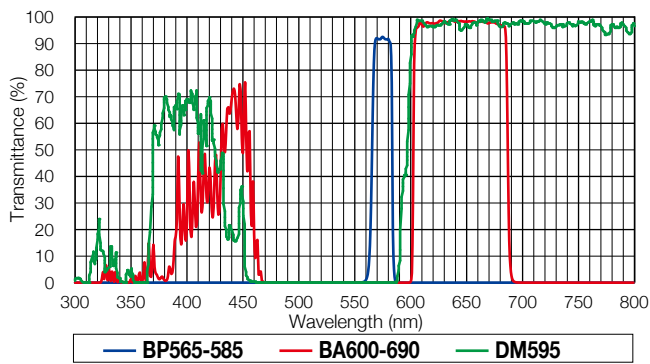
For RFP (DsRed)

U-FRFP



For mCherry

U-FMCHE



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
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-MWIG3, U-MWIGA3, U-MNIGA3
Venus	515	528	U-FYFP	U-MYFPHQ, U-MNB2, U-MNIB3, U-MNIBA3, 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-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
Alexa Fluor 546	556	573	U-FGW, U-FGWA, U-FGNA, U-FRFP	U-MWIG3, U-MWIGA3, U-MNIGA3
Alexa Fluor 555	555	567	U-FGW, U-FGWA, U-FGNA, U-FRFP	U-MWIG3, U-MWIGA3, U-MNIGA3
Alexa Fluor 568	578	603	U-FGW, U-FGWA, U-FGNA, U-FRFP, U-FYW, U-MCHE	U-MWIG3, U-MWIGA3, U-MNIGA3, 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
Phycoerythrin R (PE-R)	490, 565	578	U-FGNA, U-FGW, U-FGWA, U-FRFP	U-MNIGA3, U-MWIG3, U-MWIGA3
Rhodamine B-isothiocyanate (RITC)	543	580	U-FGW, U-FGWA, U-FGNA, U-FRFP	U-MWIG3, U-MWIGA3, U-MNIGA3
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

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
Acriflavine-Feulgen	455	515	U-FBVW, U-FBW, U-FBWA	U-MWBV2, U-MNBV2, U-MWIB3, U-MWIBA3, U-MWB2
Auramine O-Feulgen	460	550	U-FBW, U-FBWA, U-FBNA	U-MWIB3, U-MNIB3, U-MWIBA3, U-MNIBA3, U-MWB2, U-MNIB2
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
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
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