

## EXCITATION AND EMISSION CHARACTERISTICS OF COMMON FLUORESCENT DYES

The following are from publications from Martin Wessendorf. Please see: MW Wessendorf and TC Brelje "Multicolor fluorescence microscopy using the laser-scanning confocal microscope", Neuroprotocols 2: 121-140 (1993)

\* Items added to list from Handbook of fluorescent probes and research chemicals, by R. P. Haugland, 6<sup>th</sup> ed. Molecular Probes

FLUOROCHROME	EXCITATION	EMISSION
3-Hydroxypyrene 5,8,10-Tri Sulfonic acid	403	513
5-Hydroxy Tryptamine	380-415	520-530
5-Hydroxy Tryptamine (5-HT)	400	530
Acid Fuchsin	540	630
Acridine Orange (boundtoDNA)	502	526
Acridine Red	455-600	560-680
Acridine Yellow	470	550
Acriflavin	436	520
AFA (Acriflavin Feulgen SITSA)	355-425	460
Alizarin Complexon	530-560	580
Alizarin Red	530-560	580
Allophycocyanin	650	661
ACMA	430	474
Aminoactinomycin D	555	655
Aminocoumarin	350	445
Anthroyl Stearate	361-381	446
Astrazon Brilliant Red 4G	500	585
Astrazon Orange R	470	540
Astrazon Red 6B	520	595
Astrazon Yellow 7GLL	450	480
Atabrine	436	490
Auramine	460	550

FLUOROCHROME	EXCITATION	EMISSION
Aurophosphine	450-490	515
Aurophosphine G	450	580
BAO9 (Bisaminophenyloxadiazole)	365	395
BCECF	505	530
Berberine Sulphate	430	550
Bisbenzamide	360	600-610
BOBO1	462	481
Blancophor FFG Solution	390	470
Blancophor SV	370	435
Bodipy FI	503	512
BOPRO1	462	481
Brilliant Sulphoflavin FF	430	520
Calcien Blue	370	435
Calcium Green	505	532
Calcofluor RW Solution	370	440
Calcofluor White	440	500-520
Calcophor White ABT Solution	380	475
Calcophor White Standard Solution	365	435
Cascade Blue	400	425
Catecholamine	410	470
Chinacrine	450-490	515
Coriphosphine O	460	575
Coumarin-Phalloidin	387	470
CY3.18	554	568
Cy3	554	568
CY5.18	649	666
CY7	710	805
DAMC	388	520

FLUOROCHROME	EXCITATION	EMISSION
Dans (1-Dimethyl Amino Naphthalene 5 Sulphonic Acid)	340	525
Dansa (Diamino Naphthyl Sulphonic Acid)	340-380	430
Dansyl NH-CH <sub>3</sub> in water	340	578
DAPI	350	470
Diamino Phenyl Oxydiazole (DAO)	280	460
DiIC18	550	565
Dimethylamino-5-Sulphonic acid	310-370	520
DiOC18	484	501
Diphenyl Brilliant Flavine 7 GFF	430	520
Dopamine	340	490-520
Eosin	525	545
Erythrosin ITC	530	558
Ethidium Bromide+DNA	510	595
Euchrysin	430	540
FIF (Formaldehyde Induced Fluorescence)	405	435
Flazo Orange	375-530	612
Fluorescein Isothiocyanate (FITC)	490	525
Fluo3	485	503
Fura-2	340-380	512
Genacryl Brilliant RedB	520	590
Genacryl Brilliant Yellow 10GF	430	485
Genacryl Pink 3G	470	583
Genacryl Yellow 5GF	430	475
Gloxalic Acid	405	460
Granular Blue	355	425
Green Beads	440	510
Haematoporphyrin	530-560	580
Hoechst 33258 (bound to DNA)	346	460

FLUOROCHROME	EXCITATION	EMISSION
Indo-1	350	405-482
Intrawhite Cf Liquid	360	430
Leucophor PAF	370	430
Leucophor SF	380	465
Leucophor WS	395	465
Lissamine Rhodamine B200 (RD200)	575	595
Lucifer Yellow CH	425	528
Lucifer Yellow VS	430	535
Magdala Red	524	600
Maxilon Brilliant Flavin 10 GFF	450	495
Maxilon Brilliant Flavin 8 GFF	460	495
MPS (Methyl Green Pyronine Stilbene)	364	395
Mithramycin	450	570
* Mito-Tracker Green FM	490	515
NBD Amine	450	530
Nile Red	515-530	525-605
Nitrobenzoxadidole	460-470	510-650
Noradrenaline	340	490-520
Nuclear Fast Red	289-530	580
Nuclear Yellow	365	495
Nylosan Brilliant Flavin E8G	460	510
Pararosaniline (Feulgen)	570	625
Phorwite AR Solution	360	430
Phorwite BKL	370	430
Phorwite Rev	380	430
Phorwite RPA	375	430
Phosphine 3R	465	565
Phycoerythrin R	480-565	578

FLUOROCHROME	EXCITATION	EMISSION
Pontochrome Blue Black	535-553	605
Primuline	410	550
Procion Yellow	470	600
Propidium Iodide	536	617
Pyronine	410	540
Pyronine B	540-590	560-650
Pyrozal Brilliant Flavin 7GF	365	495
Quinacrine Mustard	423	503
Red Beads	532	587
Rhodamine 123	511	534
Rhodamine 5GLD	470	565
Rhodamine 6G	526	555
Rhodamine B	540	625
Rhodamine B200	523-557	595
Rhodamine B Extra	550	605
Rhodamine BB	540	580
Rhodamine BG	540	572
Rhodamine WT	530	555
Rose Bengal	540	550-600
Serotonin	365	520-540
Sevron Brilliant Red 2B	520	595
Sevron Brilliant Red 4G	500	583
Sevron Brilliant Red B	530	590
Sevron Orange	440	530
Sevron Yellow L	430	490
SITS (Primuline)	395-425	450
SITS (Stilbenelso thiosulphonic acid)	365	460
Stilbene	335	440
Snarf 1	563	639

FLUOROCHROME	EXCITATION	EMISSION
sulph O Rhodamine BCanC	520	595
Sulpho Rhodamine G Extra	470	570
Tetracycline	390	560
TRITC (Tetramethyl RhodamineIsothiocyanate)	557	576
TRITC-Dextran	557	576
Texas Red	596	615
Thiazine Red R	510	580
Thioflavin S	430	550
Thioflavin TCN	350	460
Thioflavin 5	430	550
Thiolyte	370-385	477-484
Thiozol Orange	453	480
Tinopol CBS	390	4.3
TOTO 1	514	533
TOTO 3	642	661
True Blue	365	420-430
Ultralite	656	678
Uranine B	420	520
Uvitex SFC	365	435
Xylene Orange	546	580
XRITC	582	601