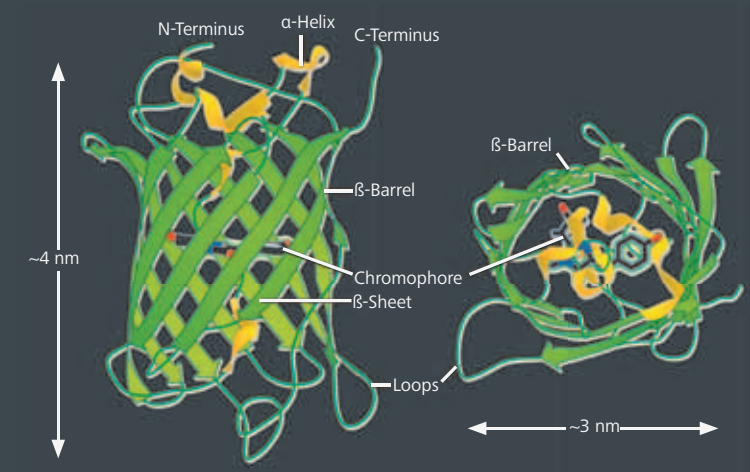
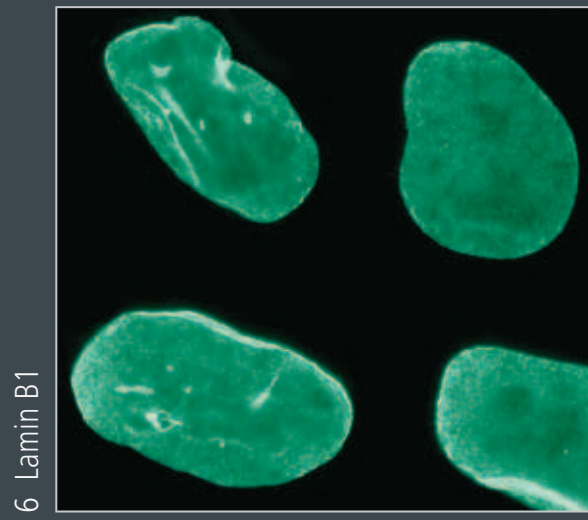


Imaging Life with Fluorescent Proteins

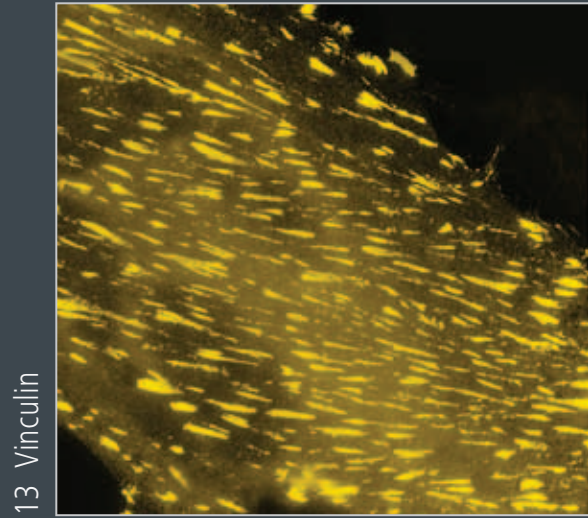


Properties of Selected *Aequorea victoria* Fluorescent Protein Variants

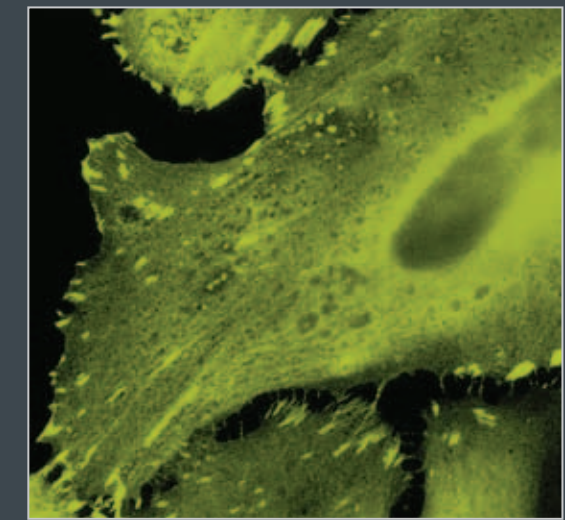
Protein (Acronym)	Ex (nm)	Em (nm)	EC (x 10 ⁻³)	QY	Photostability	Quaternary Structure	Brightness (% of EGFP)
Blue Fluorescent Proteins							
1 Sirius	355	424	15.0	0.24	+++	Monomer	11
2 Azurite	384	450	26.2	0.55	++	Monomer	43
3 EBFP	383	445	29.0	0.31	+	Monomer	27
4 EBFP2	383	448	32.0	0.56	+++	Monomer	53
Cyan Fluorescent Proteins							
5 ECFP	439	476	32.5	0.40	++	Monomer	39
6 Cerulean	433	475	43.0	0.62	++	Monomer	79
7 CyPet	435	477	35.0	0.51	++	Monomer	53
8 SCFP	433	474	30.0	0.50	++	Monomer	45
Green Fluorescent Proteins							
9 EGFP	488	507	56.0	0.60	++++	Monomer	100
10 Emerald	487	509	57.5	0.68	+++	Monomer	116
11 Superfolder	485	510	83.3	0.65	+++	Monomer	160
12 T-Sapphire	399	511	44.0	0.60	++	Monomer	79
Yellow Fluorescent Proteins							
13 EYFP	514	527	83.4	0.61	++	Monomer	151
14 Citrine	516	529	77.0	0.76	++	Monomer	174
15 Venus	515	528	82.2	0.57	++	Monomer	156
16 Topaz	514	527	94.5	0.57	++	Monomer	169
17 YPet	517	530	104.0	0.77	++	Monomer	238
16 SYFP	515	527	101.0	0.68	++	Monomer	204
19 mAmertine	406	526	45.0	0.58	+	Monomer	78



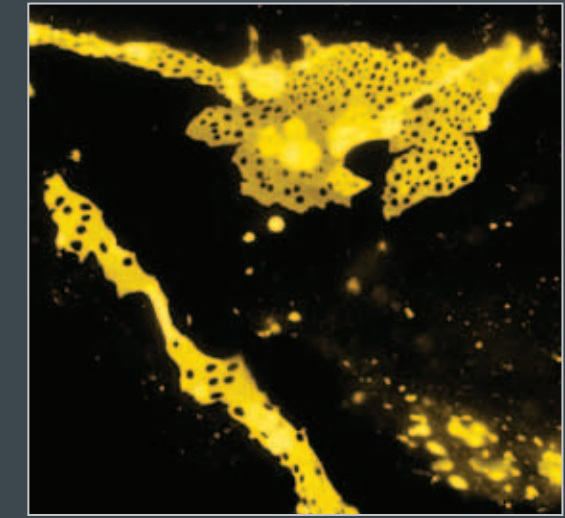
6 Lamin B1



13 Vinculin



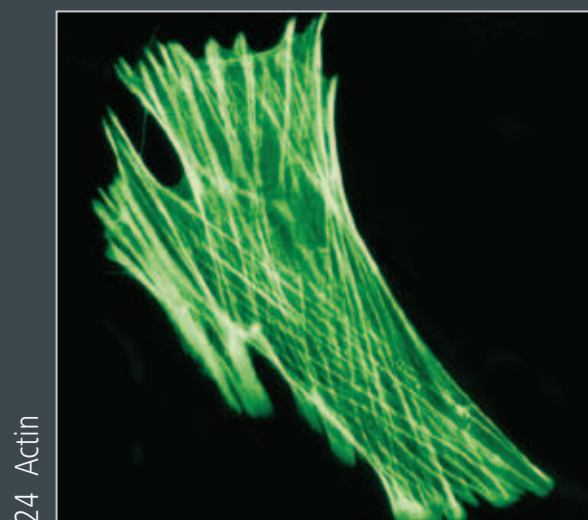
10 Integrin



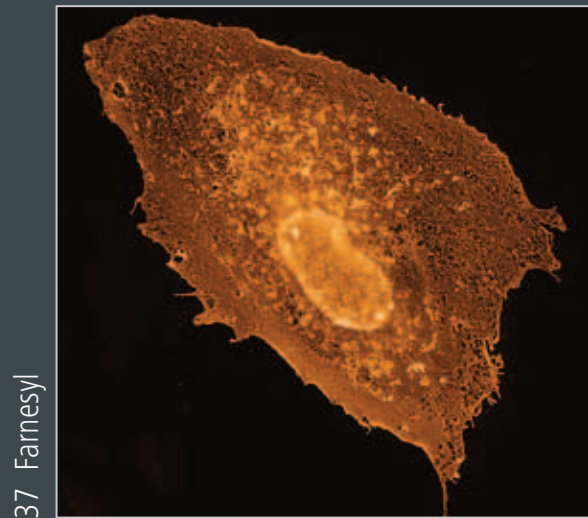
17 Cx32 Cx43

Properties of Selected *Anthozoa* Fluorescent Protein Variants

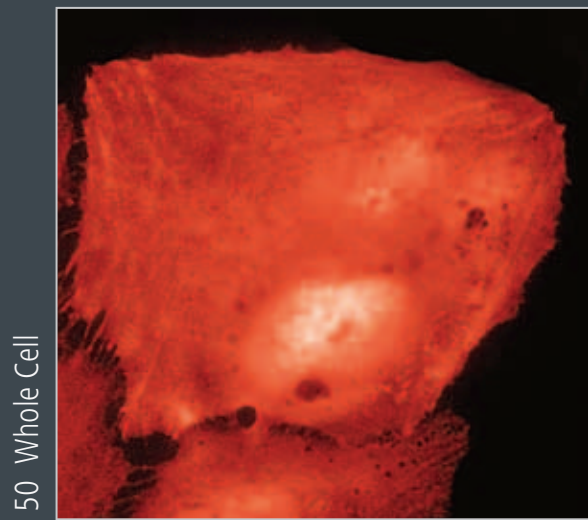
Protein (Acronym)	Ex (nm)	Em (nm)	EC (x 10 ⁻³)	QY	Photostability	Quaternary Structure	Brightness (% of EGFP)
Blue Fluorescent Proteins							
20 mTagBFP	399	456	52.0	0.63	++	Monomer	98
Cyan Fluorescent Proteins							
21 TagCFP	458	480	37.0	0.57	++	Monomer	63
22 AmCyan	458	489	44.0	0.24	+++	Tetramer	31
23 MiCy	472	495	27.3	0.90	++	Dimer	73
24 mTFP1	462	492	64.0	0.85	+++	Monomer	162
Green Fluorescent Proteins							
25 Azami Green	492	505	55.0	0.74	++	Monomer	121
26 mWasabi	493	509	70.0	0.80	++	Monomer	167
27 ZsGreen	493	505	43.0	0.91	++	Tetramer	117
28 TagGFP	482	505	58.2	0.59	++	Monomer	102
29 TagGFP2	483	506	56.5	0.60	+++	Monomer	105
30 TurboGFP	482	502	70.0	0.53	+++	Dimer	112
31 CopGFP	482	502	70.0	0.60	++	Tetramer	125
32 AceGFP	480	505	50.0	0.55	++	Monomer	82
Yellow Fluorescent Proteins							
33 TagYFP	508	524	64.0	0.60	++	Monomer	118
34 TurboYFP	525	538	105.0	0.53	++	Monomer	169
35 ZsYellow	529	539	20.2	0.42	++	Tetramer	25
36 PhiYFP	525	537	130.0	0.40	++	Dimer	158
Orange Fluorescent Proteins							
37 Kusabira Orange	548	559	51.6	0.60	+++	Monomer	92
38 Kusabira Orange2	551	565	63.8	0.62	+++	Monomer	118
39 mOrange	548	562	71.0	0.69	+	Monomer	146
40 mOrange2	549	565	58.0	0.60	++++	Monomer	104
41 dTomato	554	581	69.0	0.69	++	Dimer	142
42 tdTomato	554	581	138.0	0.69	+++	Monomer	283
43 DsRed	558	583	75.0	0.79	+++	Tetramer	176
44 DsRed2	563	582	43.8	0.55	+++	Tetramer	72
45 DsRed-Express	555	584	38.0	0.51	+++	Tetramer	58
46 DsRed-Express2	554	586	35.6	0.42	++	Tetramer	45
47 DsRed-Monomer	556	586	35.0	0.10	+	Monomer	10
48 DsRed-Max	560	589	48.0	0.41	++	Tetramer	59
49 TurboRFP	553	574	92.0	0.67	++	Dimer	187
50 TagRFP	555	584	100.0	0.48	++	Monomer	142
51 TagRFP-T	555	584	81.0	0.41	++++	Monomer	99
Red Fluorescent Proteins							
52 mRuby	558	605	112.0	0.35	++	Monomer	117
53 mApple	568	592	75.0	0.49	+++	Monomer	109
54 mStrawberry	574	596	90.0	0.29	+	Monomer	78
55 AsRed2	576	592	56.0	0.05	+	Tetramer	8
56 mRFP1	584	607	50.0	0.25	++	Monomer	37
57 JRed	584	610	44.0	0.20	++	Dimer	26
58 mCherry	587	610	72.0	0.22	+++	Monomer	47
59 eqFP611	559	611	78.0	0.45	+	Tetramer	106
60 tdRFP611	558	609	70.0	0.47	++	Pseudo Monomer	98
61 HcRed1	588	618	20.0	0.02	+	Dimer	1
62 mRaspberry	598	625	86.0	0.15	+	Monomer	38
Far-Red Fluorescent Proteins							
63 tdRFP 639	589	631	90.4	0.16	++	Pseudo Monomer	43
64 mKate	588	635	31.5	0.28	+++	Monomer	26
65 mKate2	588	633	62.5	0.40	+++	Monomer	74
66 Katushka	588	635	65.0	0.34	+++	Dimer	67
67 tdKatushka	588	633	132.5	0.37	+++	Monomer	146
68 HcRed-Tandem	590	637	160.0	0.04	++	Pseudo Monomer	19
69 mPlum	590	649	41.0	0.10	+++	Monomer	12
70 AQ143	595	655	90.0	0.04	+	Tetramer	11



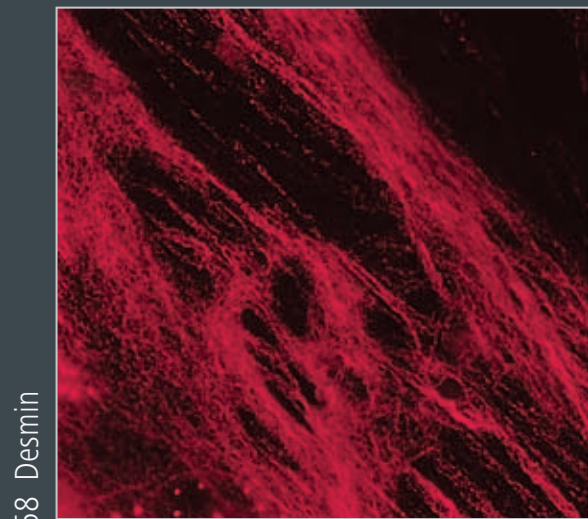
24 Actin



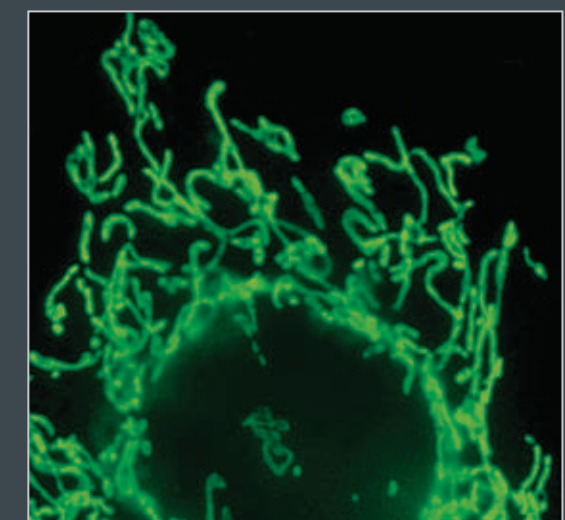
37 Farnesyl



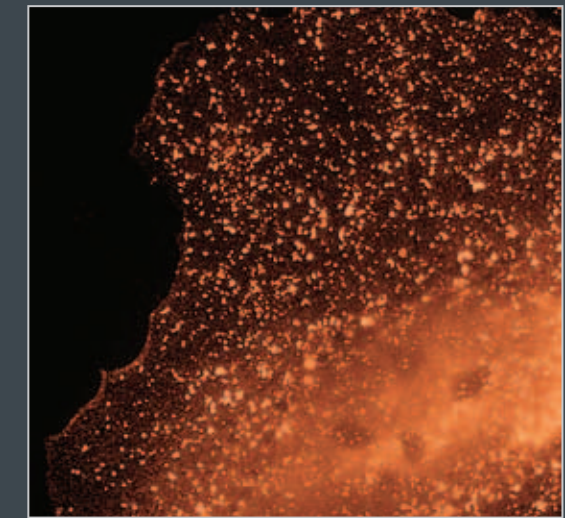
50 Whole Cell



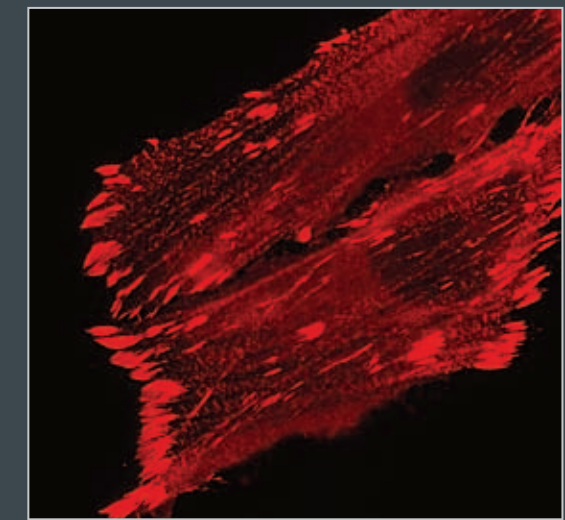
58 Desmin



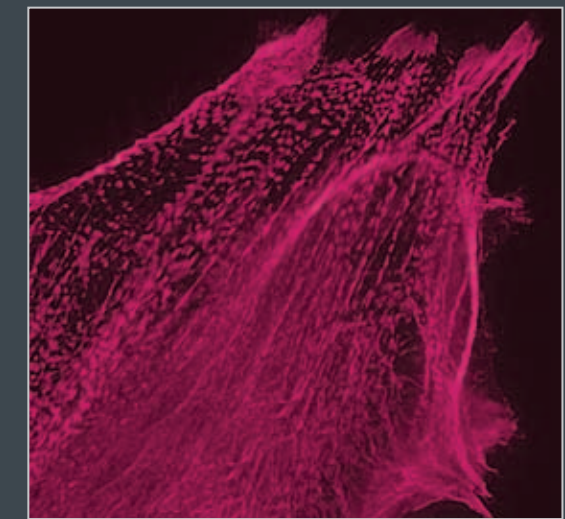
26 Mitochondria



42 Clathrin



52 VASP



69 Alpha-Actinin

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