

Bright Ideas for Chemical Biology

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TABLE S-1. Photophysical Properties of Fluorophores 1–30.

Fluorophore	Solvent	λ_{\max} (nm)	ϵ (M ⁻¹ cm ⁻¹)	λ_{em} (nm)	Φ	$\epsilon \times \Phi$ (M ⁻¹ cm ⁻¹)	Ref
quinine 1	pH 2	347	5 400	448	0.55	3 000	1
phenylalanine 2	H ₂ O	260	200	282	0.024	5	2, 3
tyrosine 3	H ₂ O	275	1 500	303	0.14	210	2, 3
tryptophan 4	H ₂ O	280	6 300	348	0.13	820	2, 3
NADH 5	H ₂ O	340	6 200	435	0.019	120	2, 4
FMN 6	H ₂ O	450	12 200	530	0.25	3 100	2, 5
EDANS 7	H ₂ O	336	6 100	520	0.27	1 600	6
Lucifer Yellow 8	H ₂ O	428	12 300	535	0.21	2 600	7
pyrene 9	MeOH	340	43 000	376	0.75	32 000	8, 9
4-MU 10	pH 10	360	17 000	450	0.63	11 000	10
AMC 11	MeOH	351	18 000	430	0.75	14 000	11
DAPI 12	H ₂ O/DNA	358	21 000	461	0.34	7 100	8, 12
Hoechst 33342 13	H ₂ O/DNA	350	45 000	461	0.38	17 000	8, 12
NBD 14	MeOH	465	22 000	535	0.3	7 000	8
bimane 15	pH 7.4	390	5 300	482	0.3	2 000	13
Cascade Yellow 16	MeOH	409	24 000	558	0.56	13 000	8, 14
fluorescein 17	pH 9	490	93 000	514	0.95	88 000	3, 8
RH ₁₁₀ 18	pH 7.5	496	74 000	517	0.92	68 000	15
TMR 19	MeOH	540	95 000	565	0.68	65 000	11
SRH ₁₀₁ 20	pH 7	586	108 000	605	0.77	83 000	8, 11
naphthofluorescein 21	pH 9.5	595	44 000	660	0.14	6 200	16
SNARF-1 22	pH 10	573	44 000	631	0.092	4 100	17
propidium 23	H ₂ O/DNA	535	5 400	617	0.13	700	8, 12
BODIPY-FL 24	MeOH	505	91 000	511	0.94	86 000	11
BODIPY-TR 25	MeOH	588	68 000	616	0.84	57 000	11
Cy3 26	pH 7	554	130 000	568	0.14	18 000	18
Cy5 27	pH 7	652	200 000	672	0.18	36 000	18
Cy7 28	pH 7	755	200 000	778	0.02	4 000	18
IRDye 700DX 29	H ₂ O	689	165 000	700	0.14	23 000	19
resorufin 30	pH 9.5	572	56 000	585	0.74	41 000	20

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