

Photofunctional transition metal complexes as cellular probes, bioimaging reagents and phototherapeutics†

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Electronic Supplementary Information

Table S1. Emission quantum yields of selected transition metal complexes.

Complex	Medium	$\lambda_{\text{ex}}/\text{nm}$	Φ_{em}	Reference
3	CH ₃ CN (degassed)	355	0.054	1
4	Tris-HCl buffer (aerated)	450	0.00056	2
5	PBS (aerated)	450	0.001	3
6	H ₂ O	515	0.04	4
7	CH ₃ OH:PBS (3:7, v/v)	380	0.002	5
9f	CH ₃ OH:PBS (1:9, v/v)	UV lamp	0.084 (N ₂), 0.041 (Air), 0.030 (O ₂)	6
10f	PBS	405	0.042	7
11c	DMSO:PBS = (9:1, v/v, degassed)	405	0.13	8
12	CH ₃ OH	450	0.015	9
13b	DMSO:PBS = (3:7, v/v, degassed)	455	0.027	10
15a	CH ₂ Cl ₂ (degassed)	355	0.0012	11

16	H ₂ O	380	0.062	12
18	H ₂ O (aerated)	LED lamp	0.036	13
19b	CH ₃ CN	431	0.0023	14
21b	DMSO (aerated)	300	< 0.01	15
21d	DMSO (aerated)	310	< 0.01	15
23	PBS	375	0.004	16
24a	CH ₂ Cl ₂ (degassed)	455	0.023	17
24b	CH ₂ Cl ₂ (degassed)	455	0.005	17
24c	CH ₂ Cl ₂ (degassed)	455	0.011	17
24d	CH ₂ Cl ₂ (degassed)	455	0.0120	17
25d	CH ₃ CN (degassed)	436	0.008	18
26	CH ₃ OH:PBS = (1:1, v/v, aerated)	405	0.001	19
27a	CH ₃ CN:PBS = (1:1, v/v, degassed)	455	0.045	20

27b	CH ₃ CN: PBS = (1:1, v/v, degassed)	455	0.039	20
27c	CH ₃ CN: PBS = (1:1, v/v, degassed)	455	0.10	20
27d	CH ₃ CN: PBS = (1:1, v/v, degassed)	455	0.091	20
27e	CH ₃ CN:PBS = (1:1, v/v, degassed)	455	0.56	20
27f	CH ₃ CN: PBS = (1:1, v/v, degassed)	455	0.39	20
28	CH ₃ CN	365	0.74 (N ₂)	21
29a	DMSO:H ₂ O = (39:1, v/v)	405	0.13 (N ₂)	22
30a	PBS	405	0.018 (N ₂)	23
30b	PBS	405	0.011	23
30c	PBS	405	0.014	23
31	CH ₃ OH (aerated)	460	0.028	24
32g	CH ₃ CN	355	0.028	25
33a	DMSO:H ₂ O = (1:9, v/v, aerated)	365	0.044	26

33b	DMSO:H ₂ O = (1:9, v/v, aerated)	365	0.021	26
33c	DMSO:H ₂ O = (1:9, v/v, aerated)	365	0.015	26
35b	CH ₃ CN	633	0.275	27
37a	PBS (degassed)	455	0.01	28

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