

Table 1 | Key characteristics of TagRFP in comparison with the parent dimeric TurboRFP and another pair: tetrameric DsRed2 and DsRed-based monomer mCherry

	DsRed2	mCherry	TurboRFP	TagRFP
Oligomerization	Tetramer	Monomer	Dimer	Monomer
Excitation max (nm)	563	587	553	555
Emission max (nm)	582	610	574	584
Quantum yield	0.55	0.22	0.67	0.48
Extinction coefficient ($M^{-1}cm^{-1}$)	65,000	72,000 (78,000 ^a)	92,000	100,000
Brightness (% of DsRed2)	100	44 (48 ^a)	172	134
pK _a	4.5	<4.5	4.4	<4.0
Phase/modulation lifetime (ns)	-	1.4/1.4 (<i>n</i> = 16)	-	2.2/2.3 (<i>n</i> = 20)

^aOur data for mCherry.

-, not measured.