

FRET pair	Donor excitation peak, nm	Donor emission peak, nm	Acceptor excitation peak, nm	Acceptor emission peak, nm	Donor QY	Acceptor EC, M <sup>-1</sup> cm <sup>-1</sup>	Forster radius (R <sub>0</sub> ), nm	comments	References
EBFP2-mEGFP	383	448	489	509	0.56	57,500	4.8		(152)
TagBFP-TagGFP2	402	457	483	506	0.63	56,500	5.3		(419)
PS-CFP2-phiYFP	400	468	525	537	0.20	130,000	6.1	Very good spectral separation. phiYFP is a weak dimer.	(409, 510)
GFP2-YFP	~400	~510	~515	~530	0.55	84,000	-	Good spectral separation	(517)
T-Sapphire-DsRed	399	511	563	582	0.60	43,800	-	Very good spectral separation. DsRed is a tetramer.	(430)
T-Sapphire-TdTomato	399	511	554	581	0.60	138,000	-	Very good spectral separation. tdTomato is a tandem	(6)
E0GFP-mCherry	400	508	587	610	0.60	72,000	5.1	Very good spectral separation.	(11)
mAmertine-TagRFP	406	526	555	584	0.58	100,000	-	Very good spectral separation.	(6)
mAmertine-tdTomato	406	526	554	581	0.58	138,000	-	Very good spectral separation. tdTomato is a tandem	(6)
ECFP-EYFP	434	477	515	527	0.40	83,400	4.9		(116, 336)
CyPet-Ypet	435	477	517	530	0.51	104,000	5.1	enhanced dimerization	(311, 321)
mTFP1-mCitrine	462	492	516	529	0.85	64,000	-		(6)
mECFP-cp157Venus	434	477	515	528	0.40	92,200	5.1		(7)
mCerulean-cp157Venus	433	475	515	528	0.62	92,200	5.3		(7)
mTFP1-cp157Venus	462	492	515	528	0.85	92,200	5.7		(7)
mTFP1-mOrange	462	492	548	562	0.85	71,000	5.7	Good spectral separation	(7)
MiCy-mKO	472	495	548	559	0.90	51,600	5.3	Good spectral separation. MiCy is a dimer	(200)
mUKG-mKO	483	499	548	559	0.72	51,600	-	Good spectral separation	(436)
TagGFP-TagRFP	482	505	555	584	0.59	100,000	5.7	Very good spectral separation	(390)
EGFP-mCherry	489	509	587	610	0.60	72,000	5.1	Very good spectral separation.	(152)
Venus-tdTomato	515	528	554	581	0.57	138,000	5.9	tdTomato is a tandem	(152)
Venus-mCherry	515	528	587	610	0.57	72,000	5.7	Very good spectral separation.	(152)
mCitrine-mKate2	516	529	588	633	0.57	62,500	-	Very good spectral separation.	(303)
Venus-mPlum	515	528	590	649	0.57	41,000	5.2	Very good spectral separation. Plum is dim.	(152)
TagRFP-mPlum	555	584	590	649	0.48	41,000	-	Plum is dim.	(127)

FIG. 20. Selected FRET pairs of fluorescent proteins.