

eGFP	MVSKGEEL---FTGVVPILVELDGDVNGHKFSVSGEGEGDATYQKLTTLKFIC-TTGKLPVPWPVLVTTLT	YGVQCFSRYPDHMKQHDFFKSAMPEGYVQ	***
PA-GFP	MVSKGEEL---FTGVVPILVELDGDVNGHKFSVSGEGEGDATYQKLTTLKFIC-TTGKLPVPWPVLVTTFS	YGVQCFSRYPDHMKQHDFFKSAMPEGYVQ	
mcherry	MVSKGEEDNMAIIKEFMRFKVHLEGSVNGHEFEIEGEGEGRPYEGTQTAKLKVTKGGLPFAFDILSPQF	MYGSKAYVKHPADI--PDYFKLSFPEGFKW	
PA-mcherry3	MVSKGEEDNMAIIKEFMRFKVHLEGSVNGHEFEIEGEGEGRPYEGTQTAKLKVTKGGLPFTWDILSPQF	MYGSKAYVKHPADI--PDYFKLSFPEGFKW	
TagRFP	-----MSELIKENMHMKLYMEGTIVNNHFFKCTSEGECKPYEGTQTMRIKVVEGGPLPFAFDILATS	FMYGSRTFINHTQGI--PDFFKQSFPEGFTW	
PA-TagRFP	-----MSELIKENMHMKLYMEGTIVNNHFFKCTSEGECKPYEGTQTMRIKVVEGGPLPFAFDILATS	FMYGSRTFINHTQGI--PDFFKQSFPEGFTW	
PA-TagRFP1314	-----MSELIKENMHMKLYMEGTIVNNHFFKCTSEGECKPYEGTQTMRIKVVEGGPLPFAFDILATS	FMYGSRTFINHTQGI--PDFFKQSFPEGFTW	
PA-TagRFP1297	-----MSELIKENMHMKLYMEGTIVNNHFFKCTSEGECKPYEGTQTMRIKVVEGGPLPFAFDILATS	FMYGSRTFINHTQGI--PDFFKQSFPEGFTW	
mApple	MVSKGEENNMAIIKEFMRFKVHLEGSVNGHEFEIEGEGEGRPYEAFTAKLKVTKGGLPFAFDILSPQF	MYGSKVYIKHPADI--PDYFKLSFPEGFRW	
mPlum	MVSKGE---EVIKEFMRFKEHMEGSVNGHEFEIEGEGEGRPYEGTQTARLKVTKGGLPFAWDILSPQF	MYGSKAYVKHPADI--PDYFKLSFPEGFKW	
mRuby	-----MNSLIKENMRMKVVLEGSVNGHQFKCTGEGEGNPYMGQTQTMRIKVIEGGPLPFAFDILATS	FMYGSRTFIKYPKGI--PDFFKQSFPEGFTW	
eGFP	ERTIFFKDDGNYKTRAEVKFEGDTLVNRIELKGIDFKEDGNILGKFL-EYNYNSHNVIYIMADKQKNGIKV	NFKIRHNIEDGSV---QLADHYQQNTPIGD	
PA-GFP	ERTIFFKDDGNYKTRAEVKFEGDTLVNRIELKGIDFKEDGNILGKFL-EYNYNSHNVIYIMADKQKNGI	KANFKIRHNIEDGSV---QLADHYQQNTPIGD	
mcherry	ERV MNFEDGGVVTVTQDSSLQDGEFIYKVKLRGTNFPSPG PVMQKKTMGWEASSERMYPEDG----	ALKGEIKQRLKLDGGHYDAEVKTTYKAKKPV--	
PA-mcherry3	ERV MNFEDGGVVTVTQDSSLQDGEFIYKVKLRGTNFPSPG PVIQKKTMGWDALSERMYPEDG----	ALKGELKARLKLKDDGGHYAAEVKTTYKAKKPV--	
TagRFP	ERVTTYEDGGVLTATQDTSIQDGLIYNVKIRGVNFPSNGPVMQKKTGWEANTEMLYPADG----	GLEGRSDMALKLVGGGHLICNFKTTYRSKKPAKN	
PA-TagRFP	ERVTTYEDGGVLTATQDTSIQDGLIYNVKIRGVNFPSNGPVMQKKTGWEPTSEKLKPADG----	GLEGRVDMALKLVGGGHLICNFKTTYRSKKPAKN	
PA-TagRFP1314	ERVTTYEDGGVLTATQDTSIQDGLIYNVKIRGVNFPSNGPVMQKKTGWEPTSEMLYPADG----	GLEGVNMMALKLVGGGHLICNFKTTYRSKKPAKN	
PA-TagRFP1297	ERVTTYEDGGVLTATQDTSIQDGLIYNVKIRGVNFPSNGPVMQKKTGWEPTSEMLYPADG----	GLEGVNMALKLVGGGHLICNFKTTYRSKKPAKN	
mApple	ERV MNFEDGGIIHVNQDSSLQDGVFIYKVKLRGTNFPSPG PVMQKKTMGWEASSERMYPEDG----	ALKSEIKKRLKLKDDGGHYAAEVKTTYKAKKPV--	
mPlum	ERV MNFEDGGVVTVTQDSSLQDGEFIYKVKVRGTNFPSPG PVMQKKTMGWEASSERMYPEDG----	ALKGEMKMRLRLKDDGGHYDAEVKTTYMAKKPV--	
mRuby	ERVTRYEDGGVITVMQDTSLEDGCLVYHAQVRGVNFPSNGAVMQKKTGWEPTNTEMMYPADG----	GLRGYTHMALKVDGGGHLSCSFVTTYRSKKTVGW	
eGFP	GPVLLPDNHYLSTQSALS KDPNEKRDH MVLL E FVTAAGITLGMDELYK-----		
PA-GFP	GPVLLPDNHYL SHQSKLS KDPNEKRDH MVLL E FVTAAGITLGMDELYK-----		
mcherry	---QLPGAYNVNIKL DITS-HNEDY TIVEQYERAEGRHSTGGMDELYK-----		
PA-mcherry3	---QLPGAYNVNRKL DITS-HNEDY TIVEQYERAEGRHSTGGMDELYK-----		
TagRFP	--LKMPGVVYVDHRLERIK-EADKET YVEQHEVAVARYCDLPS-----KLGHK-----		
PA-TagRFP	--LKMPGVVYVDRRLEI IK-EADKET YWEQHEVAVARYCDLPS-----KLGHK-----		
PA-TagRFP1314	--LKMPGVVYVDRRLEQIK-EADKET YWEQHEVAVARYCDLPS-----KLGHK-----		
PA-TagRFP1297	--LKMPGVVYVDRRLEQIK-EADKET YWEQHEVAVARYCDLPS-----KLGHK-----		
mApple	---QLPGAYIVDIKL DIVS-HNEDY TIVEQYERAEGRHSTGGMDELYKSGLRSAQASNSAVDGTAGPGSTGSR		
mPlum	---QLPGAYKTDIKL DITS-HNEDY TIVEQYERAEGRHSTGA-----		
mRuby	--IKMPGIH AVDHRLERLE-ESDNEMFV VQREH AVAKFAGLGG-----G-----		