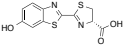
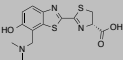
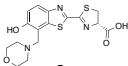
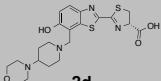
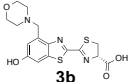


Enzyme	% WT light emission ^a	Normalized k_{cat}/K_M ^b	λ_{max} (nm)	Compound
A	1.2 ± 0.35	0.041 ± 0.016	612	 D-luc
B	0.92 ± 0.17	0.013 ± 0.004	616	
C	94 ± 8.4	5.22 ± 0.58	570	
A	0.19 ± 0.02	0.034 ± 0.008	614	 2b
B	0.33 ± 0.09	0.050 ± 0.020	614	
C	17 ± 5.2	5.0 ± 1.3	574	
A	0.16 ± 0.02	0.253 ± 0.065	614	 2c
B	3.7 ± 0.76	1.09 ± 0.36	618	
C	16 ± 2.3	8.2 ± 2.2	600	
A	0.47 ± 0.01	0.121 ± 0.025	— ^c	 2d
B	0.81 ± 0.09	0.155 ± 0.061	604	
C	22 ± 2.3	6.0 ± 1.7	570	
A	38 ± 13	17.1 ± 6.4	622	 3b
B	200 ± 41	83 ± 37	628	
C	13 ± 2	13.1 ± 5.7	626	

^a Analog values normalized to their corresponding emission with Fluc. Errors represent standard error of the mean for $n = 3$ measurements. ^b Kinetic constants are apparent values, determined via measurements of initial rates of light emission over a range of 2 μM to 10 mM. Errors represent standard error of the mean for $n \geq 3$ measurements. k_{cat} values are relative to their corresponding value with Fluc. Errors represent standard error of the mean for $n \geq 3$ measurements. ^c λ_{max} value could not be determined due to low level of light emission.