Table S1. Photoadduct lifetimes of LOV domains.

LOV domain	Estimated excited state lifetime (s)[3]	Reference
AtPH1-LOV2	~40	(Kasahara *et al*, 2002; Katsura *et al*, 2009)
AtPH2-LOV2	~7	(Kasahara *et al*, 2002; Katsura *et al*, 2009)
CrPH-LOV1	[1]	(Kutta *et al*, 2008)
NcVV-LOV	>10'000	(Schwerdtfeger & Linden, 2003)
RsLP-LOV	~2350	(Conrad *et al*, 2013)
VfAU1-LOV	WT: 625 (220 at 37°C) I28V (I472V): 50 (30 at 37°C)	This work
VfAU1-LOV[2]	~300	(Takahashi *et al*, 2007)
VfAU1-LOV[2]	WT: 480 I28V (I472V): 60	(Mitra *et al*, 2012)

[1] A triple exponential decay with lifetimes ranging from 20 to 800 s was observed.

[2] LOV domains included C- and N-terminal extensions compared to VfAU1-LOV of this work and the work of Toyooka *et al.*(Toyooka *et al*, 2011)

[3] Where necessary, published half lifes ($t_{1/2}$) were converted to lifetimes assuming a first order reaction ($\tau = t_{1/2}/\ln(2)$).

Experiments where performed at 20°C or RT unless stated otherwise.

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