

Table S1 Statistical analysis for the dose response data in Figures 3, 5, S2 and S3.

Goodness of fits for dose-response relationships where R^2 indicates the percentage of the variability in the response that is explained by the explanatory variable (UV-B dose); p-value indicates the probability that the coefficients obtained are equal to 0 ($\alpha=0.05$), and Shapiro-Wilk test indicates the normal distribution of the data when $P>0.05$.

Figure S2

					Normality test (P)
					Shapiro-Wilk
					significance level 0.05
Wavelength	Fit	R^2	P-Value	Normality test (P)	
260	$ax/(b+x)$	0.9468	<0.0001	0.5326	passed
263	$ax/(b+x)$	0.9851	<0.0001	0.5505	passed
266	$ax/(b+x)$	0.9757	0.0002	0.5442	passed
269	$ax/(b+x)$	0.9966	<0.0001	0.9484	passed
272	$ax/(b+x)$	0.9991	0.0005	0.1733	passed
275	$ax/(b+x)$	1	<0.0001	0.3378	passed
278	$ax/(b+x)$	0.9997	0.0001	0.3649	passed
280	$ax/(b+x)$	1	<0.0001	0.3505	passed
282	$ax/(b+x)$	0.9991	0.0004	0.2289	passed
284	$ax/(b+x)$	0.9997	0.0001	0.2286	passed
286	$ax/(b+x)$	0.9998	0.0001	0.7996	passed
288	$ax/(b+x)$	0.9985	<0.0001	0.9969	passed
290	$ax/(b+x)$	0.9784	0.0014	0.9343	passed
292	$ax/(b+x)$	0.988	0.0006	0.8177	passed
294	$y_0+ax/(b+x)$	0.9914	0.0086	0.8319	passed
296	$ax/(b+x)$	0.9964	<0.0001	0.9981	passed
298	$ax/(b+x)$	0.9952	0.0001	0.8768	passed
300	$ax/(b+x)$	0.9912	0.0003	0.5682	passed
302	$ax/(b+x)$	0.9963	<0.0001	0.6935	passed
304	$ax/(b+x)$	0.9897	0.0004	0.7334	passed
306	$y_0+ax/(b+x)$	0.9974	0.0515	0.8827	passed
308	$ax/(b+x)$	0.9942	0.0029	0.8209	passed
310	$ax/(b+x)$	0.9876	0.0062	0.8211	passed
312	$ax/(b+x)$	1	NAN	<0.0001	failed
314	$ax/(b+x)$	1	NAN	<0.0001	failed

Figure 3

Wavelength	Fit	R ²	P-Value	Normality test (P)	
280	$ax/(b+x)$	0.8717	0.0664	0.0604	passed
290	$ax/(b+x)$	0.9966	0.0017	0.1091	passed
300	$ax/(b+x)$	0.9869	0.0066	0.6604	passed
310	$ax/(b+x)$	0.9891	0.0055	0.909	passed
320	y_0+ax	0.6892	0.169	0.2947	passed

Figure 5

Wavelength	Fit	Rsqr	P-Value	Normality test (P)	
280	$ax/(b+x)$	0.8976	0.0526	0.4245	passed
290	$ax/(b+x)$	0.9405	0.0302	0.2576	passed
300	$ax/(b+x)$	0.9765	0.0118	0.3017	passed
310	$ax/(b+x)$	0.9827	0.0087	0.8849	passed
320	$ax/(b+x)$	0.9889	0.0056	0.8778	passed

Figure S3

Wavelength	Fit	Rsqr	P-Value	Normality test (P)	
260	$ax/(b+x)$	0.9658	0.0027	0.3576	passed
265	$ax/(b+x)$	0.9741	0.0018	0.1235	passed
270	$ax/(b+x)$	0.9299	0.008	0.7706	passed
280	$ax/(b+x)$	0.9998	<0.0001	0.2016	passed
285	$ax/(b+x)$	0.9802	0.0012	0.9236	passed
290	$ax/(b+x)$	0.9889	<0.0001	0.8067	passed
300	$ax/(b+x)$	0.9193	0.0006	0.6868	passed
310	$ax/(b+x)$	0.9753	0.0017	0.05	passed