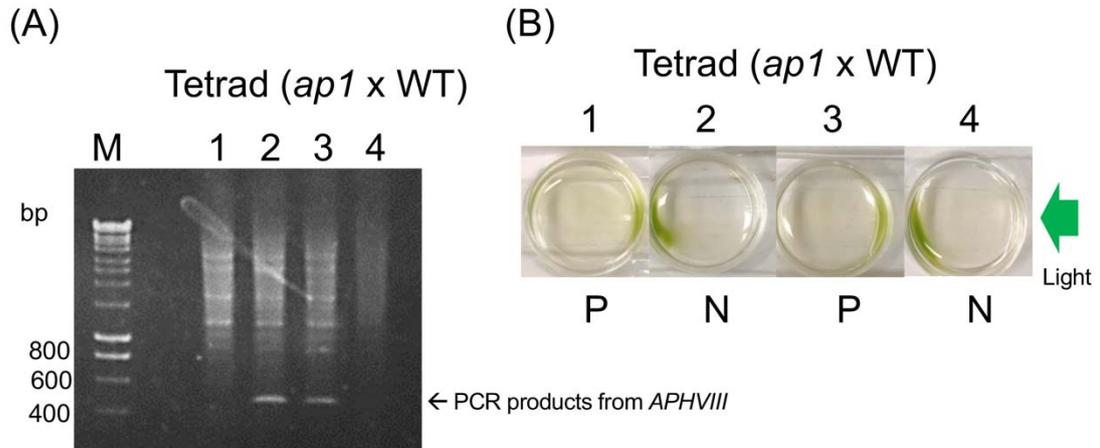


Supplementary Figure



(C)

	<i>ap1</i>		<i>ap2</i>		<i>ap3</i>		<i>ap4</i>		<i>ap5</i>		<i>ap6</i>		<i>ap7</i>	
	<i>APHVIII</i> insertion	Positive phototaxis												
Progeny 1	-	+	-	+	-	+	-	+	+	+	-	+	+	-
Progeny 2	+	-	+	-	+	-	+	-	-	-	+	-	+	+
Progeny 3	+	+	+	-	-	-	+	+	-	+	+	-	-	+
Progeny 4	-	-	-	+	+	+	-	-	+	-	-	+	-	-

**Figure S1. Tetrad analysis to test linkage between phenotype and genotype.** (A) An example of PCR of the tetrad progenies *ap1* × WT. Here, progenies 2 and 3 had *APHVIII* insertion. (B) Phototaxis analysis after treatment with 75 mM DMTU for the same tetrad as (A). Progeny 1 and 3 showed positive (P), and 2 and 4 showed negative (N) phototaxis. From the data in (A) and (B), the *ap* phenotype in *ap1* is shown not to be caused by *APHVIII* insertion. (C) Representative tetrad analyses of each *ap* mutant. Each tetrad contained a progeny with *APHVIII* insertion that did not show positive phototaxis after treatment with DMTU.