**Supplemental Figure 4.** Respective nucleotide alignments between *AqvAP3-1* (A), *AqvAP3-2* (B) or *AqvAP3-3* (C) and the *AqvPI* fragment used in the TRV2-*AqvPI-AqvANS* construct. Shading indicates sequence identity. Note that a contiguous 21-23 nucleotide stretch of exact identity would be required for cross-silencing (Burch-Smith et al., 2004).

AqvAP3-1 AqvPl	10   20   30     T G G A A G A A T A T G C A C T A G C G G A T C A T G A A G     T T G G C G G A A T G A A T G A A G A G A A A T G G A A A
AqvAP3-1 AqvPl	40 50 60   G A T T G T C T G C A C T T G A A A T G G C G C T A A T G   A T G G A T A T C A T C A A A A G G A A G G G A C T A T C
AqvAP3-1 AqvPl	70 80 90 G T G C T T C A C A T A T A T T C G C A T T T C G T T G C C T G C T C A G A T G C C A T T C A C C T T C C G T G T T C
AqvAP3-1 AqvPl	100   110   120     A A C C A A G C C A G C C A A A T C T T C A T G G T G A C G     A G C C A A T C A G C C T A A T T T A C A G G A G A G T A
AqvAP3-1 AqvPl	130   140   150     G A G G A T G T G G A T   T C G A A G A T C T C C G A C T A G     A T A G C A C A A A G T   A T - C A C C T A C A T G A G C
AqvAP3-1 AqvPl	160   170   170   180     G A T G A G T A G A A T T A G A G G T C A C A A A C C T     C T T A T C A T G A G A A G C T A T A G C T A T G C T T T T G A G G A T
AqvAP3-1 AqvPl	190 200 200 200 210   T T T C C A - T C C T A G C G T   T A A T G C A - T C T A G C G T   T A A T C T A G C G T
AqvAP3-1 AqvPl	A T A T G C T A T G T G T A G T C T A A G T C T A A G T C T A A T G T A A A T C T A A A T T A A T T A A A T A A A A T A
AqvAP3-1 AqvPl	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
AqvAP3-1 AqvPl	T G T A G C T G C T T A C C T A C A T A A T A A C A T A A T A A T A A T A A T A A T A A T A A T A A T A A T A A T A A T A A T A A A A A A A A A A A A A
AqvAP3-1 AqvPl	310 320 320 320 330   T C A A - A A C T G C T A G C T A G C T T G G T T T G G A A A T G   T C A A - A A C T T T T A A A G T T T C T C T C T G A T A A A G G T T T C T C T C T G A T A A G G

Suppl. Fig 4.A

AqvAP3-2 AqvPl	10   20   30     A   T   G   C   A   T   T   A   G   C   T   T   A   G   C   T   T   G   C   T   T   G   C   T   T   G   C   T   T   G   C   T   T   G   C   T   T   G   C   T   T   G   A   C   T   T   G   A   C   T   T   G   A   C   T   T   G   A   C   T   T   G   A   C   T   T   G   A   C   T   T   G   A   C   T   T   A
AqvAP3-2 AqvPl	T   T   G   A   A   G   G   T   G   A   T   T   A   C   C   A   G   T   T   G   G   T   G   G   T   G   A   T   T   A   C   C   A   G   T   T   G   G   G   T   G   G   G   T   T   G   G   G   T   G   G   T   G   G   G   T   G   G   G   T   G   G   G   T   G   G   G   T   G   G   G   T   G   G   G   T   G   G   G   T   G   G   G   T   G   G   G   G   T   G   G   G   T   G   G   G   G   G   G   G   T   G   G   G   G   G   G   G   G   G   G   G   G   G   G   G   G   G   G
AqvAP3-2 AqvPl	70   80   90     T T G C T A C T G G G A A T C C C A G A T C T T T G G A A G G G A C T A T C C T G C T G C T C A G A T G C C A T T C A
AqvAP3-2 AqvPl	100   110   120     C A T T C C G C T T G C G C T T C C G   C T T C C G T C C G T C C A G C C A A C C C A A C C C A A C C C A C C C A C C C A C C C A C C C A C C C C A C C C C A C C C C A C C C C A C C C C A C C C C A C C C C C A C C C C C A C
AqvAP3-2 AqvPl	130   140   140   150     140   140   140   150     140   140   140   140   140   150     140   140   140   140   140   140   150     140   1
AqvAP3-2 AqvPl	160   170   170   180     A T G G T T T A A G T C A G G A G C T T G A A T T A A G C T   170   17
AqvAP3-2 AqvPl	190   200   210     G G A A A T C A T G C T T A T G A T C A T T C A A T A - T C A G A   T C A T C A A T A - T C A T A G A     A T T G C T T T G A G A G G A T T A A T A A T G C A G G T C A T T A
AqvAP3-2 AqvPl	C   T   C   C   T   A   T   C   T
AqvAP3-2 AqvPl	T   T   A   T   T   C   T   G   A   C   T   G   T   T   G   T   T   G   T   T   G   T   T   G   T   T   T   G   T   T   G   T   T   G   T   T   G   T   T   G   T   T   G   T   T   G   T   T   G   T   T   G   T   T   G   T   T   G   T   T   G   T   T   G   T   T   T   G   T   T   T   T   T   T   T   T   T   T   G   T
AqvAP3-2 AqvPl	280   290   300     T T G T C A G T A T G T C T G A T G T C T G A T G T A T G T - C T G A T C A A A A T T T C T G G G T C A T C A T C A T C A T C A T C A T G A T C A T G G A T C A T G G A C
AqvAP3-2 AqvPl	310   320   320   330     T   T   T   A   C   G   T   T   A   T   G   T   T   C   A   T   G   T   T   C   A   T   C   T   T   C   T   T   C   T   T   C   T   T   C   T   T   C   T   T   T   C   T   T   T   C   T <td< td=""></td<>
AqvAP3-2 AqvPl	340     C   T   G   G   T   T   G   A   C   T   T   T   T     T   T   C   T   T   G   A   T   T   T   T   T

Suppl. Fig. 4.B

AqvAP3-3 AqvPl	10   10   20   30     A A G A T C C T T A C T A C G A A G G C
AqvAP3-3 AqvPl	40   50   50   60     -   -   -   -   -   -   -   -   -   -   60     A   T   G   A   T   C   C   T   A   T   A   T   C   C   A     A   T   G   G   A   T   C   C   T   A   T   A   T   C   C   A     A   T   G   G   A   T   C   C   A   T   C   C   A     A   T   G   G   A   T   C   C   A   T   C   A   G   G   A   A   G
AqvAP3-3 AqvPl	70   80   80   90     90   90   90     90   90
AqvAP3-3 AqvPl	100   110   110   120     30   100   100   100   100   100   100   100   120     40   10   10   10   100
AqvAP3-3 AqvPl	130   140   140   150   150     140   150   140   150   150   150     140   150   150   150   150   150   150     150   150   150   150   150   150   150   150     150   1
AqvAP3-3 AqvPl	160   170   170   180     G A C T T G G C T T A A A A C A G T C G T C G T T G G C G T T A A A T     A T G A G C C T T A T C A T C A T G A T A G C T A T G C T A T T G C T T T T
AqvAP3-3 AqvPI	190   200   210     A A G C A G T T T T T T T C C A C T T A A G A C T T C T A A C     G A G G A T T A A T G C A G G T C A T T A A T C T C T A T T
AqvAP3-3 AqvPl	220   230   240     T A A A A A T T A T G A T T T G T T T T
	220   230   240     T A A A A T T A T G A T T T G T T T T T
AqvPI AqvAP3-3	220   230   240     T A A A A A T T A T G A T T T G T T T T
AqvPI AqvAP3-3 AqvPI AqvAP3-3	220   230   230   240     T A A A A A T T A T G A T G G A T T T G T T T T

Suppl. Fig. 4.C