

Validation report

DAS-ELISA PeAMV

Article No.: 170877 (PeAMV Complete kit 96) / 170875 (PeAMV Complete kit 480) / 170872 (PeAMV Complete kit 960)

General information:

Target Pathogen	PeAMV (Petunia asteroid mosaic virus / Tombusvirus petuniae)
Genus	<i>Tombusvirus</i>
Method	DAS-ELISA

Technical information:

Antibodies	Polyclonal antibodies developed against a PeAMV isolate.
Sampling	Leaf samples: 1:20 (w/v) in extraction buffer "general".
Controls	Negative control (NC): lyophilized extracts from healthy plants Positive control (PC): lyophilized PeAMV infected plant extracts
Working volume	200 µl / well

Host matrix:

Tested plant material	Leaf Transmission by mechanical inoculation or by grafting.
Tested species infected	<i>Chenopodium amaranticolor</i> (Tree spinach/Giant Goosefoot) <i>Chenopodium quinoa</i> (Quinoa) <i>Cucurbita pepo</i> subsp. <i>pepo</i> convar. <i>giromontiina</i> (Zucchini) <i>Nicotiana benthamiana</i> (Tobacco) <i>Nicotiana glutinosa</i> (Tobacco) <i>Nicotiana tabacum</i> "Xanthi" (Tobacco) <i>Petunia x hybrida</i> (Petunia)

Specificity:

Analytical Specificity	100%
Number of tested samples from target organism (True Positives)	7
Diagnostic Specificity	100%
Number of tested samples non-target organism (True Negatives)	18
Detected isolates / geographic regions (Inclusivity)	PeAMV 1231 (Switzerland, Petunia) PeAMV 1231 (Switzerland, Tobacco) PeAMV 1231 (Switzerland, <i>Ch. amaranticolor</i>) PeAMV 1231 (Switzerland, Quinoa)
Cross reaction with (Exclusivity)	TBSV (Tomato bushy stunt virus)
No cross reaction tested with (Exclusivity)	PVA (Potato virus A) TSWV (Tomato spotted wilt virus) WMV-2 (Watermelon mosaic virus-2)
No matrix effect observed with (Selectivity)	<i>Nicotiana Benthamiana</i> (Tobacco) <i>Petunia x hybrida</i> (Petunia) <i>Prunus avium</i> (Cherry)

Sensitivity:

Diagnostic Sensitivity	100%
Analytical Sensitivity / LoD	10 ⁻⁴ dilution of infected tissue (pathogen titer unknown).
Sensitivity on host matrix	PeAMV on leaves of petunia: 1:31'250 dilution PeAMV on leaves of quinoa: 1:31'250 dilution Pathogen titer unknown
Other sensitivity characteristics	-

Validation:

Internal validation	2003
External validation	-
Reproducibility	100%
Repeatability	100%
Validation information	Internally, the reagents have been validated with the BIOREBA isolate collection, composed of various samples with diverse plant host range, collected within the last 40 years.

Validation release Date:
August 25th, 2026

QC manager:



Version: 1 – 25.08.2026.