

Validation report

DAS-ELISA PLPV

Article No.: 170477 (PLPV Complete kit 96) / 170475 (PLPV Complete kit 480) / 170472 (PLPV Complete kit 960)

General information:

Target Pathogen	PLPV (Pelargonium line pattern virus / Pelarspovirus lineapelargonii)
Genus	<i>Pelarspovirus</i>
Method	DAS-ELISA

Technical information:

Antibodies	Polyclonal antibodies developed against a PLPV isolate from <i>Pelargonium peltatum</i> .
Sampling	Leaf samples: 1:20 (w/v) in extraction buffer "General". The virus can be detected throughout the year. Petioles show higher reliability than leaves.
Controls	Negative control (NC): lyophilized extracts from healthy plants Positive control (PC): lyophilized PLPV infected plant extracts
Working volume	200 µl / well

Host matrix:

Tested plant material	Leaf, petiole Transmission by mechanical inoculation.
Tested species infected	<i>Chenopodium quinoa</i> (Quinoa) <i>Nicotiana clevelandii</i> (Tobacco) <i>Pelargonium</i> (Pelargonium)

Specificity:

Analytical Specificity	100%
Number of tested samples from target organism (True Positives)	>100
Diagnostic Specificity	100%
Number of tested samples non-target organism (True Negatives)	>100
Detected isolates / geographic regions (Inclusivity)	PLPV 1273 (Switzerland, Quinoa) PLPV PV-0193 (Germany, Quinoa) PLPV PV-0193 (Germany, Tobacco) PLPV 011199 (Switzerland, Quinoa) PLPV 281106 (Switzerland, Quinoa)
Cross reaction with (Exclusivity)	-
No cross reaction tested with (Exclusivity)	PFBV (Pelargonium flower break virus)
No matrix effect observed with (Selectivity)	<i>Chenopodium quinoa</i> (Quinoa) <i>Nicotiana clevelandii</i> (Tobacco) <i>Pelargonium</i> (Pelargonium)

Sensitivity:

Diagnostic Sensitivity	100%
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Analytical Sensitivity / LoD	10 ⁻³ dilution of infected tissue (pathogen titer unknown).
Sensitivity on host matrix	PLPV on leaves of quinoa: 1:6'250 dilution PLPV on leaves of tobacco: 1:1'250 dilution Pathogen titer unknown
Other sensitivity characteristics	-

Validation:

Internal validation	1996
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 26th, 2026

QC manager:



Version: 1 – 26.08.2026.