

Validation report

DAS-ELISA PFBV

Article No.: 170277 (PFBV Complete kit 96) / 170275 (PFBV Complete kit 480) / 170272 (PFBV Complete kit 960)

General information:

Target Pathogen	PFBV (Pelargonium flower break virus / Alphacarmovirus perlargonii)
Genus	Alphacarmovirus
Method	DAS-ELISA

Technical information:

Antibodies	Polyclonal antibodies developed against a PFBV isolate from a <i>Pelargonium zonale</i> hybrid.
Sampling	Leaf samples: 1:20 (w/v) in extraction buffer "general". Virus can be detected throughout the year.
Controls	Negative control (NC): lyophilized extracts from healthy plants Positive control (PC): lyophilized PFBV infected plant extracts
Working volume	200 µl / well

Host matrix:

Tested plant material	Leaf Transmission by vectors (thrips) and mechanical inoculation.
Tested species infected	<i>Chenopodium quinoa</i> (Quinoa) <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)	93
Detected isolates / geographic regions (Inclusivity)	PFBV 111194 (Switzerland, Pelargonium) PFBV 291294 (Switzerland, Quinoa) PFBV 011199 (Germany, Quinoa) PFBV 231299 (Switzerland, Quinoa) PFBV 060100 (Switzerland, Quinoa) PFBV 101005 (Switzerland, Pelargonium) PFBV 101016 (Switzerland, Pelargonium) PFBV 111121 (Switzerland, Pelargonium)
Cross reaction with (Exclusivity)	-
No cross reaction tested with (Exclusivity)	PLPV (Pelargonium line pattern virus)
No matrix effect observed with (Selectivity)	<i>Chenopodium quinoa</i> (Quinoa) <i>Fragaria x ananassa</i> (Strawberry) <i>Pelargonium</i> (Pelargonium)

Sensitivity:

Diagnostic Sensitivity	100%
Analytical Sensitivity / LoD	10 ⁻³ to 10 ⁻⁴ dilution of infected tissue (pathogen titer unknown).
Sensitivity on host matrix	PFBV on leaves of quinoa: 1:31'250 dilution PFBV on leaves of pelargonium: 1:6'250 dilution Pathogen titer unknown
Other sensitivity characteristics	-

Validation:

Internal validation	1988, 1994
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.