

Validation report

DAS-ELISA PRSV

Article No.: 151977 (PRSV Complete kit 96) / 151975 (PRSV Complete kit 480) / 151972 (PRSV Complete kit 960)

General information:

Target Pathogen	PRSV (Papaya ringspot virus / Potyvirus papayanuli) Synonym: WMV-1 (Watermelon mosaic virus 1)
Genus	<i>Potyvirus</i>
Method	DAS-ELISA

Technical information:

Antibodies	Polyclonal antibodies developed against the PRSV isolate HA 5-1.
Sampling	Leaf samples: 1:20 (w/v) in extraction buffer "general". Detection is best during active growing season on symptomatic leaves.
Controls	Negative control (NC): lyophilized extracts from healthy plants Positive control (PC): lyophilized PRSV infected plant extracts
Working volume	200 µl / well

Host matrix:

Tested plant material	Leaf, seed Transmission by vectors (aphids) and mechanical transmission by inoculation.
Tested species infected	<i>Cucumis metuliferus</i> (Kiwano / horned cucumber) <i>Cucurbita pepo</i> (Zucchini)

Specificity:

Analytical Specificity	100%
Number of tested samples from target organism (True Positives)	27
Diagnostic Specificity	100%
Number of tested samples non-target organism (True Negatives)	75
Detected isolates / geographic regions (Inclusivity)	PRSV HA-5-1 (Switzerland, Kiwano) PRSV 290611 (Switzerland, Zucchini) PRSV 060711 (Switzerland, Zucchini) PRSV 9418 (Switzerland, Zucchini) PRSV 1372 (Switzerland, Zucchini) PRSV 1085 (Switzerland, Zucchini)
Cross reaction with (Exclusivity)	-
No cross reaction tested with (Exclusivity)	CaMV (Cauliflower mosaic virus) CGMMV (Cucumber green mottle mosaic virus) CMV (Cucumber mosaic virus) PDV (Prune dwarf virus) TMV (Tobacco mosaic virus) ToRSV (Tomato ringspot virus) WMV-2 (Watermelon mosaic virus-2) ZYMV (Zucchini yellow mosaic virus)

No matrix effect observed with (Selectivity)	<i>Cucumis metuliferus</i> (Kiwano) <i>Cucumis sativus</i> (Cucumber) <i>Cucurbita maxima</i> (Pumpkin) <i>Cucurbita pepo</i> (Zucchini)
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Sensitivity:

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

Validation:

Internal validation	1998
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:
July 27th, 2026

QC manager:



Version: 1 – 28.07.2026.