Validation report

DAS-ELISA SLRSV

Article No.: 151677 (SLRSV Complete kit 96) / 151675 (SLRSV Complete kit 480) / 151672 (SLRSV Complete kit 960)

General information:

Target Pathogen	SLRSV (Strawberry latent ringspot virus)
Genus	*Stralarivirus*
Method	DAS-ELISA

Technical information:

Antibodies	Polyclonal antibodies developed against SLRSV isolates from peach and mint.
Sampling	Grapevine: 1:10 (w/v) in extraction buffer "Grapevine" Other plants: 1:20 (w/v) in extraction buffer "General"
Controls	Negative control (NC): lyophilized extracts from healthy plants Positive control (PC): lyophilized SLRSV infected plant extracts
Working volume	200 µl / well

Host matrix:

Tested plant material	Leaf and bark (phloem) Sap-transmissible, nematodes (*Xiphinema* spcc.), seed-transmissible
Tested species infected	*Chenopodium quinoa* (Quinoa) *Clematis* (Woodland vines) *Fragaria vesca* (Strawberry) Lilium sp. (Lilies) Mentha gentilis (Ginger mint) *Nicotiana benthamiana* (Tobacco) *Phaseolus vulgaris* (Bean) *Prunus persica* (Peach) *Robinia pseudoacacia* (Robinia) *Rosa rugosa* (Rose) *Rubus fruticosus* (Blackberry) *Vitis vinifera* (Grapevine)

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)	SLRSV 1005 (Switzerland, Quinoa) SLRSV 997 (Switzerland, Quinoa) SLRSV 34198 (Switzerland, Grapevine) SLRSV 34199 (Switzerland, Grapevine) SLRSV 38004 (Switzerland, Grapevine) SLRSV 38005 (Switzerland, Grapevine) SLSRV 40497 (Switzerland, Grapevine)

BIOREBA AG — *Your Partner in Agro-Diagnostics*
Christoph Merian-Ring 7
CH-4153 Reinach BL1
Switzerland
phone +41 61 712 11 25
fax +41 61 712 11 17
admin@bioreba.ch
www.bioreba.com

	SLRSV GF 305 27862-27866 (Switzerland, Peach) SLRSV 11092 (Switzerland, Blackberry) SLRSV 1391 5875017 (Netherlands, Quinoa) SLRSV 1391 5875017 (Netherlands, Lily) SLRSV 1390 4226509 (Netherlands, Quinoa) SLRSV 1390 4226509 (Netherlands, Tobacco) SLRSV T35 (France, Grapevine) SLRSV 12-001 (Netherlands, Lily) SLRSV 14-021 (Norway, woodland vines) SLRSV 14-022 (New Zealand, Blackberry) SLRSV 14-023 (Germany, Strawberry) SLRSV 14-024 (Netherlands, Bean) SLRSV 14-025 (Netherlands, Rose) SLRSV 14-026 (Netherlands, Rose) SLRSV 14-027 (Poland, Robinia) SLRSV 15-017 5674880 (France, Peach) SLRSV 15-018 5674899 (Switzerland, Blackberry) SLRSV NCGR MEN 454.001 (US, Ginger-Mint)
Cross reaction with (Exclusivity)	**SLRSV-C:** LycMoV (Lychnis mottle virus)
No cross reaction tested with (Exclusivity)	APMoV (Andean potato mottle viru) ArMV (Arabis mosaic virus) BYDV (Barley yellow dwarf virus) CaMV (Cauliflower mosaic virus) CLRV (Cherry leaf roll virus) CTV (Citrus tristeza virus) GFkV (Grapevine fleck virus) GFLV (Grapevine fanleaf virus) GLRaV-1 (Grapevine leafroll-associated virus 1) GLRaV-3 (Grapevine leafroll-associated virus 3) GVA (Grapevine virus A) PLRV (Potato leafroll virus) PMMoV (Pepper mild mottle virus) PVM (Potato virus M) PVS (Potato virus S) RpRSV (Raspberry ringspot virus) TBRV (Tomato black ring virus) ToRSV (Tomato ringspot virus)
No matrix effect observed with (Selectivity)	*Fragaria vesca* (Strawberry) *Narcissus* sp. (Narcissus) *Prunus domestica* (Plum) *Prunus persica* (Peach) *Rubus fruticosus* (Blackberry) *Vitis vinifera* (Grapevine)

Sensitivity:

Diagnostic Sensitivity	100%
Analytical Sensitivity / LoD	10^{-2} dilution of infected tissue (pathogen titer unknown)
Sensitivity on host matrix	SLRSV on leaves of grapevine: 1:250 dilution Pathogen titer unknown
Other sensitivity characteristics	-

Validation:

Internal validation	2015 and 2021 (last internal validation)

BIOREBA AG — *Your Partner in Agro-Diagnostics*
Christoph Merian-Ring 7
CH-4153 Reinach BL1
Switzerland
phone +41 61 712 11 25
fax +41 61 712 11 17
admin@bioreba.ch
www.bioreba.com

External validation	Validation by 1 external research partner in 2021 (NL).
Reproducibility	100%
Repeatability	100%
Validation information	Internally, the reagents have been validated with the BIOREBA isolate collection composed of various samples collected within the last 40 years.

Validation release Date:
May, 22nd, 2023

QC manager:

www.bioreba.com

BIOREBA AG — *Your Partner in Agro-Diagnostics*
Christoph Merian-Ring 7
CH-4153 Reinach BL1
Switzerland
phone +41 61 712 11 25
fax +41 61 712 11 17
admin@bioreba.ch
www.bioreba.com