

Validation report

DAS-ELISA GCLV

Article No.: 160477 (GCLV Complete kit 96) / 160475 (GCLV Complete kit 480) / 160472 (GCLV Complete kit 960)

General information:

Target Pathogen	GCLV (Garlic common latent virus / Carlavirus latensallii) Synonym: GarCLV
Genus	<i>Carlavirus</i>
Method	DAS-ELISA

Technical information:

Antibodies	Polyclonal antibodies developed against a virus mixture from infected garlic from Spain (coat) and against a GCLV isolate in garlic from China (conjugate).
Sampling	Samples: 1:20 (w/v) in extraction buffer "Bulbs & Tubers".
Controls	Negative control (NC): lyophilized extracts from healthy plants Positive control (PC): lyophilized GCLV infected plant extracts
Working volume	200 µl / well

Host matrix:

Tested plant material	Leave, chive, bulb No information about transmission available.
Tested species infected	<i>Allium sativum</i> (Garlic) <i>Chenopodium quinoa</i> (Quinoa)

Specificity:

Analytical Specificity	100%
Number of tested samples from target organism (True Positives)	20
Diagnostic Specificity	100%
Number of tested samples non-target organism (True Negatives)	44
Detected isolates / geographic regions (Inclusivity)	GCLV 1154 (Switzerland, Quinoa) GCLV BI-003-25 (Spain, Garlic) GCLV 190208 (Switzerland, Garlic) GCLV 180309 (Switzerland, Quinoa) GCLV 241111 (Switzerland, Garlic) GCLV 051211 (Switzerland, Garlic) GCLV 121211 (Switzerland, Garlic)
Cross reaction with (Exclusivity)	-
No cross reaction tested with (Exclusivity)	LYSV (Leek yellow streak virus) OYDV (Onion yellow dwarf virus) PVM (Potato virus M) PVS (Potato virus S) SLV (Shallot latent virus)
No matrix effect observed with (Selectivity)	<i>Allium cepa</i> L. (Onion) <i>Allium porrum</i> (Leek) <i>Allium sativum</i> (Garlic)

Sensitivity:

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

Validation:

Internal validation	2000, 2026
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:
April 15th, 2026

QC manager:



Version: 1 – 15.04.2026