

Validation report

DAS-ELISA OYDV

Article No.: 160277 (OYDV Complete kit 96) / 160275 (OYDV Complete kit 480) / 160272 (OYDV Complete kit 960)

General information:

Target Pathogen	OYDV (Onion yellow dwarf virus / Potyvirus cepae)
Genus	<i>Potyvirus</i>
Method	DAS-ELISA

Technical information:

Antibodies	Polyclonal antibodies developed against an OYDV isolate in onion from Germany.
Sampling	<i>Allium</i> species samples (bulbs and leaves): 1:20 (w/v) in extraction buffer "Bulbs & Tubers". All other samples: 1:20 (w/v) in extraction buffer "General".
Controls	Negative control (NC): lyophilized extracts from healthy plants Positive control (PC): lyophilized OYDV infected plant extracts
Working volume	200 µl / well

Host matrix:

Tested plant material	Leaf, bulb, stalk Transmission by vectors (aphids).
Tested species infected	<i>Allium cepa</i> (Onion) <i>Allium sativum</i> (Garlic) <i>Alliaria petiolata</i> (Garlic herb)

Specificity:

Analytical Specificity	100%
Number of tested samples from target organism (True Positives)	87
Diagnostic Specificity	100%
Number of tested samples non-target organism (True Negatives)	34
Detected isolates / geographic regions (Inclusivity)	OYDV 1185 (Switzerland, Garlic) OYDV 1185 (Switzerland, Garlic herb) OYDV BI-008-24 (Spain, Garlic) OYDV BI-002-25 (Spain, Garlic) OYDV 150812 (Switzerland, Onion) OYDV 210420 (Switzerland, Garlic herb) OYDV 030620 (France, Garlic herb) OYDV 201020 (Switzerland, Garlic herb) OYDV 210721 (Netherlands, Garlic herb) OYDV 210322 (Switzerland, Garlic herb) OYDV 100123 (Switzerland, Garlic herb) OYDV 060223 (Switzerland, Garlic herb) OYDV 270223 (Switzerland, Garlic herb) OYDV 130323 (Switzerland, Garlic herb) OYDV 180423 (Switzerland, Garlic herb) OYDV 020523 (Switzerland, Garlic herb)

	OYDV 150523 (Switzerland, Garlic herb) OYDV 230523 (Switzerland, Garlic herb) OYDV 210624 (France, Garlic) OYDV 020724 (France, Garlic)
Cross reaction with (Exclusivity)	-
No cross reaction tested with (Exclusivity)	GCLV (Garlic common latent virus) LYSV (Leek yellow stripe virus) SLRSV (Strawberry latent ringspot virus) TYLCV (Tomato yellow leaf curl virus)
No matrix effect observed with (Selectivity)	<i>Allium ampeloparasum</i> (Leek) <i>Allium cepa</i> (Onion) <i>Allium fistulosum</i> (Spring Onion) <i>Allium sativum</i> (Garlic) <i>Alliaria petiolata</i> (Garlic herb)

Sensitivity:

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

Validation:

Internal validation	1998, 2021
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 17th, 2026

QC manager:



Version: 1 – 17.04.2026.