

Validation report

DAS-ELISA Xfr

Article No.: 150377 (Xfr Complete kit 96) / 150375 (Xfr Complete kit 480) / 150372 (Xfr Complete kit 960)

General information:

Target Pathogen	Xfr (<i>Xanthomonas fragariae</i>)
Genus	<i>Xanthomonas</i>
Method	DAS-ELISA

Technical information:

Antibodies	Polyclonal antibodies developed against Xfr strain 184.2 multiplied in Switzerland.
Sampling	Leaf samples: 1:10 (w/v) in extraction buffer "General". Ideally suited for first screening for indexing strawberry plants.
Controls	Negative control (NC): lyophilized extracts from healthy plants Positive control (PC): lyophilized Xfr infected plant extracts
Working volume	200 µl / well

Host matrix:

Tested plant material	Leaf
Tested species infected	<i>Fragaria x ananassa</i> (Strawberry)

Specificity:

Analytical Specificity	85.7%
Number of tested samples from target organism (True Positives)	14
Diagnostic Specificity	85.7%
Number of tested samples non-target organism (True Negatives)	24
Detected isolates / geographic regions (Inclusivity)	Xfr 140709 (Switzerland, Strawberry) Xfr 100614 (Switzerland, Strawberry) Xfr 131 (Switzerland, Strawberry) Xfr 175 (Switzerland, Strawberry) Xfr 207 (Switzerland, Strawberry) Xfr 276 (Switzerland, Strawberry) Xfr 315 (Switzerland, Strawberry) Xfr 437 (Switzerland, Strawberry) Xfr 174 (Switzerland, Strawberry) Xfr 325 (Switzerland, Strawberry) Xfr 387 (Switzerland, Strawberry) Xfr 461 (Switzerland, Strawberry)
Cross reaction with (Exclusivity)	<i>Xanthomonas arboricola</i> pv. <i>fragariae</i> <i>Xanthomonas campestris</i> pv. <i>Pelargonii</i> (10 ⁵ CFU/ml) <i>Xanthomonas campestris</i> pv. <i>Begonia</i> (10 ⁷ CFU/ml) <i>Xanthomonas campestris</i> pv. <i>Pruni</i> (10 ⁷ CFU/ml)
No cross reaction tested with (Exclusivity)	<i>Xanthomonas campestris</i> pv. <i>Campestris</i> <i>Xanthomonas campestris</i> pv. <i>phaseoli</i> <i>Erwinia carotovora</i> subsp. <i>carotovora</i>

	<i>Erwinia herbicola</i> <i>Pseudomonas syringae</i> PVA (Potato virus A)
No matrix effect observed with (Selectivity)	<i>Fragaria x ananassa</i> (Strawberry) <i>Rubus fruticosus</i> (Blackberry) <i>Rubus idaeus</i> (Raspberry)

Sensitivity:

Diagnostic Sensitivity	100%
Analytical Sensitivity / LoD	Diluted bacteria cultures can be detected at a concentration of 10^3 CFU per ml. 10^{-6} dilution of infected tissue (pathogen titer unknown).
Sensitivity on host matrix	Xfr on strawberry leaves: 1:3'906'250 dilution Pathogen titer unknown
Other sensitivity characteristics	-

Validation:

Internal validation	1993
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 30th, 2026

QC manager:



Version: 1 – 30.07.2026.