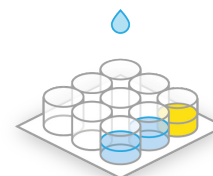


# Validation Report: ELISA

BRA 14600 • *Xanthomonas* genus specific (Xan)



## Test Characteristics

|                       |                            |                           |                     |
|-----------------------|----------------------------|---------------------------|---------------------|
| <b>Test Name</b>      | Xanthomonas genus specific | <b>Capture Antibody</b>   | Polystyrene Plate   |
| <b>Catalog Number</b> | 14600                      | <b>Detection Antibody</b> | Monoclonal (Mouse)  |
| <b>Acronym</b>        | Xan                        | <b>Format</b>             | ACP-ELISA           |
| <b>Genus</b>          | Xanthomonas                | <b>Diluents</b>           | CCB/MPBST           |
|                       |                            | <b>Sample Dilution</b>    | Bacterial Streaming |

## Summary

This ELISA test is a qualitative serological assay for the detection of the *Xanthomonas* (Xan) genus in bacterial cultures and plant vascular tissue streams. The *Xanthomonas* genus is known for having 27 plant disease causing species able to infect 400 plant species.

## Diagnostic Sensitivity

|                          |     |
|--------------------------|-----|
| <b>True Positives</b>    | 33  |
| <b>Correct Diagnoses</b> | 32  |
| <b>Percent</b>           | 97% |

## Analytical Specificity

## Analytical Sensitivity

### Inclusivity:

#### Species Detected and Analytical Sensitivity:

|   |                          |
|---|--------------------------|
| <i>Stenotrophomonas maltophilia</i>                         | 6x10 <sup>5</sup> CFU/mL |
| <i>Xanthomonas arboricola</i> pv. <i>celebensis</i>         | 3x10 <sup>5</sup> CFU/mL |
| <i>Xanthomonas arboricola</i> pv. <i>pruni</i> (Xap)        | 8x10 <sup>3</sup> CFU/mL |
| <i>Xanthomonas axonopodis</i> pv. <i>begonia</i> (Xab)      | 7x10 <sup>4</sup> CFU/mL |
| <i>Xanthomonas axonopodis</i> pv. <i>citri</i> (Xac)        | 1x10 <sup>4</sup> CFU/mL |
| <i>Xanthomonas axonopodis</i> pv. <i>diefenbachia</i> (Xad) | 4x10 <sup>4</sup> CFU/mL |
| <i>Xanthomonas axonopodis</i> pv. <i>phaseoli</i> (Xaph)    | 1x10 <sup>2</sup> CFU/mL |
| <i>Xanthomonas campestris</i> pv. <i>armoraciae</i> (Xca)   | 4x10 <sup>4</sup> CFU/mL |
| <i>Xanthomonas campestris</i> pv. <i>campestris</i> (Xcc)   | Unknown                  |
| <i>Xanthomonas campestris</i> pv. <i>poinsettiicola</i>     | Unknown                  |
| <i>Xanthomonas campestris</i> pv. <i>zinnia</i>             | 2x10 <sup>4</sup> CFU/mL |
| <i>Xanthomonas citri</i> pv. <i>aurantifolii</i>            | 1x10 <sup>5</sup> CFU/mL |
| <i>Xanthomonas citromelo</i>                                | 3x10 <sup>4</sup> CFU/mL |
| <i>Xanthomonas fragariae</i>                                | Unknown                  |
| <i>Xanthomonas hortorum</i> pv. <i>pelargonii</i> (Xhp)     | 2x10 <sup>4</sup> CFU/mL |
| <i>Xanthomonas oryzae</i> pv. <i>oryzae</i> (Xoo)           | 1x10 <sup>4</sup> CFU/mL |
| <i>Xanthomonas translucens</i> pv. <i>translucens</i> (Xtt) | 4x10 <sup>5</sup> CFU/mL |
| <i>Xanthomonas vesicatoria</i>                              | 2x10 <sup>3</sup> CFU/mL |



Agdia, Inc.  
52642 County Road 1  
Elkhart, IN 46514  
574-264-2014 / 800-622-4342  
[www.agdia.com](http://www.agdia.com) / [info@agdia.com](mailto:info@agdia.com)

**Exclusivity:****Cross-reacts With:**

|   |                          |
|---|--------------------------|
| Clavibacter flaccumfaciens subsp. poinsettiae | Pseudomonas fuscovaginae |
|---|--------------------------|

**Does Not Cross-react With:**

|  |   |
|--|---|
| Acidovorax avenae pv. citrulli (Xac)             | Agrobacterium radiobacter                                 |
| Agrobacterium rhizogenes                         | Agrobacterium vitas                                       |
| Agrobacterium tumefaciens                        | Burkholderia glumae (Bg)                                  |
| Clavibacter michiganensis pv. insidiosus (Cmi)   | Clavibacter michiganensis pv. michiganensis (Cmm)         |
| Clavibacter michiganensis pv. nebraskensis (Cmn) | Clavibacter michiganensis pv. sepedonicus (mucooid) (Cms) |
| Clavibacter michiganensis pv. tessellarius (Cmt) | Clavibacter poinsettiae                                   |
| Dickeya chrysanthemi                             | Erwinia amylovora (Ea)                                    |
| Ochrobactrum lupini                              | Ochrobactrum sp.  |
| Pantoea agglomerans                              | Pantoea stewartii (Pstew)                                 |
| Pectobacterium atrosepticum (Patro)              | Pectobacterium carotovora pv. carotovora                  |
| Pseudomonas avenae                               | Pseudomonas savastanoi pv. phaseolicola (Psph)            |
| Pseudomonas savastanoi pv. glycineae             | Pseudomonas syringae pv. syringae (Pss)                   |
| Pseudomonas syringae pv. tomato (Pst)            | Ralstonia solanacearum (Rs)                               |
| Spiroplasma citri (Sc)                           | Xanthomonas albilineans (Xalb)                            |
| Xylella fastidiosa (Xf)                          |   |

**Diagnostic Specificity**

True Negatives 33  
 Correct Diagnoses 33  
 Percent 100%

**Selectivity:**

|  |                               |  |  |
|--|-------------------------------|--|--|
| <b>No Matrix Effect Observed With:</b> |                               |  |  |
| Bacterial cultures                     | Plant vascular tissue streams |  |  |



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