

# Validation Report: ELISA

SRA 32503 • *Xanthomonas hortorum* pv. *pelargonii* (Xhp)



## Test Characteristics

<b>Test Name</b>	Xanthomonas hortorum pv. pelargonii	<b>Capture Antibody</b>	Polyclonal (Rabbit)
<b>Catalog Number</b>	32503	<b>Detection Antibody</b>	Monoclonal (Mouse)
<b>Acronym</b>	Xhp	<b>Format</b>	DAS-ELISA
<b>Genus</b>	Xanthomonas	<b>Diluents</b>	GEB/ECM
		<b>Sample Dilution</b>	1:10

## Summary

This ELISA test is a qualitative serological assay for the detection of *Xanthomonas hortorum* pv. *pelargonii* (Xhp), the causal agent of bacterial blight, in geraniums. Xhp is a member of the Xanthomonas genus known for its many species and pathovars infecting over 400 plant species.

## Diagnostic Sensitivity

<b>True Positives</b>	58
<b>Correct Diagnoses</b>	58
<b>Percent</b>	100%

## Analytical Sensitivity

**Limit of Detection:** 3x10<sup>3</sup> CFU/mL

## Analytical Specificity

### Inclusivity:

This assay was designed to detect all strains and isolates of Xhp. Fifty-eight distinct samples of Xhp have been experimentally proven to be detected.

### Exclusivity:

#### Cross-reacts With:

Xanthomonas arboricola pv. celebensis	Xanthomonas campestris pv. caroate
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#### Does Not Cross-react With:

Acidovorax avenae pv. avenae	Acidovorax avenae pv. citrulli
Agrobacterium tumefaciens	Burkholderia glumae
Clavibacter michiganensis subsp. insidiosus	Clavibacter michiganensis subsp. nebraskensis
Clavibacter michiganensis subsp. sepedonicus	Clavibacter michiganensis subsp. tessellarius
Curtobacterium flaccumfaciens subsp. poinsettiae	Dickeya chrysanthemi
Erwinia amylovora	Ochrobactrum lupini
Ochrobactrum sp. N11	Pantoea agglomerans
Pantoea stewartii	Pectobacterium carotovora pv. atroseptica
Pectobacterium carotovora pv. carotovora	Pseudomonas fuscovaginae
Pseudomonas savastanoi pv. glycineae	Pseudomonas savastanoi pv. phaseolicola



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**Does Not Cross-react With:**

Pseudomonas syringae pv. syringae	Pseudomonas syringae pv. tomato
Ralstonia solanacearum	Spiroplasma citri
Stenotrophomonas maltophilia	Verticillium dahlia
Xanthomonas albilineans	Xanthomonas axonopodis pv. begonia
Xanthomonas axonopodis pv. citri	Xanthomonas axonopodis pv. diffenbachia
Xanthomonas axonopodis pv. phaseoli	Xanthomonas campestris pv. armoraciae
Xanthomonas campestris pv. begoniae	Xanthomonas campestris pv. campestris
Xanthomonas campestris pv. poinsetticola	Xanthomonas citromelo
Xanthomonas fragariae	Xanthomonas oryzae pv. oryzae
Xanthomonas translucens pv. translucens	Xanthomonas vesicatoria
Xylella fastidiosa	

**Diagnostic Specificity**

True Negatives 77  
 Correct Diagnoses 77  
 Percent 100.0%

**Selectivity:**

<b>No Matrix Effect Observed With:</b>			
Bacterial cultures	Cauliflower leaves	Geranium leaves	Geranium petioles
Geranium stems	Geranium roots	Tobacco leaves	Tomato leaves
Watermelon leaves			



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