



ImmunoStrip® Validation Report

On-site Plant Pathogen Testing

Potato virus A (PVA)

ISK/STX 60000

ImmunoStrip®

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Test Characteristics

Test Name	Potato virus A	Capture Antibody	Polyclonal (Rabbit)
Catalog Number	60000	Detection Antibody	Polyclonal (Rabbit)
Acronym	PVA	Format	Lateral Flow Device
Genus	Potyvirus	Diluents	SEB4
		Sample Dilution	1:20

Summary

The Potato virus A (PVA) ImmunoStrip is used to detect the presence of PVA in potato leaves. PVA is a member of the Potyvirus genus known for their non-enveloped, flexuous, filamentous virus particles. ImmunoStrips are the perfect screening tool for use in the field, greenhouse, and the lab.

Diagnostic Sensitivity

True Positives	19
Correct Diagnoses	18
Percent	94.7%

Analytical Sensitivity

Limit of Detection: 1:2,000 dilution of infected tissue (pathogen titer unknown)

Analytical Specificity

Inclusivity:

This assay was designed to detect all strains and isolates of PVA. Eighteen distinct samples of PVA have been experimentally proven to be detected.

Exclusivity:

Cross-reacts With:

None Known	
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Does Not Cross-react With:

Alfalfa mosaic virus (AMV)	Clavibacter michiganensis subsp. sepedonicus (Cms)
Cucumber green mottle mosaic virus (CGMMV)	Cucumber mosaic virus (CMV)
Impatiens necrotic spot virus (INSV)	Pepino mosaic virus (PepMV)
Pepper mild mottle virus (PMMoV)	Potato aucuba mosaic virus (PAMV)
Potato latent virus (PotLV)	Potato leafroll virus (PLRV)
Potato mop-top virus (PMTV)	Potato virus M (PVM)
Potato virus S (PVS)	Potato virus X (PVX)
Potato virus Y (PVY)	Tobacco etch virus (TEV)
Tobacco mosaic virus (TMV)	Tobacco streak virus (TSV)
Tomato mosaic virus (ToMV)	Tomato spotted wilt virus (TSWV)

Diagnostic Specificity

True Negatives 15
Correct Diagnoses 15
Percent 100%

Selectivity:

No Matrix Effect Observed With:			
Potato leaves			

Repeatability

Number of Samples 19
Replicates per Sample 2
Average Percent Agreement 100%
Between Replicates

Reproducibility

Number of Samples 10
Replicates per Sample 2
Number of Operators 3
Average Percent Agreement Between 100%
Replicates Between Operators