Validation Report: ELISA





Test Characteristics

Test Name Bean common mosaic virus Capture Antibody Polystyrene Plate Catalog Number 46000 **Detection Antibody** Monoclonal (Mouse)

Acronym BCMV Format ACP-ELISA Diluents IEB/ECI Genus Potyvirus

Sample Dilution 1:100

Summary

This ELISA test is a qualitative serological assay for the detection of Bean common mosaic virus (BCMV) and Bean common mosaic necrosis virus (BCMNV) in bean leaves. This is not a specific test for BCMV or BCMNV. BCMV and BCMNV are members of the Potyvirus genus known for their non-enveloped, flexuous, filamentous virus particles.

Diagnostic Sensitivity

Analytical Sensitivity

True Positives 19 Limit of Detection: 1:6,210 dilution of infected tissue (pathogen titer unknown)

Correct Diagnoses 19

Percent 100%

Analytical Specificity

Inclusivity:

Isolates and Geographic Regions Detected:

BCMNV (BCMV serotype-A)	BCMV serotype-B
BCMV-NY15	

Exclusivity:

Cross-reacts With:

Papaya ringspot virus (PRSV)	Pepper mottle virus (PepMoV)
Plum pox virus (PPV)	Potato virus A (PVA)
Potato virus Y (PVY)	Soybean mosaic virus (SMV)
Tobacco etch virus (TEV)	Watermelon mosaic virus (WMV)
Zucchini yellow mosic virus (ZYMV)	

Does Not Cross-react With:

Wheat streak mosaic virus (WSMV)



Diagnostic Specificity

True Negatives 12

Correct Diagnoses 12

Percent 100%

Selectivity:

No Matrix Effect Observed With:				
Bean leaves				